

Curriculum Vitae – Summary

(Extended CV follows appended)

7 January 2021

Personal Information

Emparan, Roberto

Birth date: February 11, 1967

Nationality: Spanish

Education

- 1995 PhD at University of Basque Country, Spain. Thesis title: “Black holes: Processes of spontaneous creation and quantum corrections to the entropy” (Extraordinary Prize of the Faculty of Sciences)
1990 BSc at University of Basque Country, Spain (Extraordinary Prize for Physics at Faculty of Sciences)

Current position

- 2003 – ICREA Research Professor at Department of Quantum Physics and Astrophysics, and Institute of Cosmos Sciences, University of Barcelona (ICCUB)

Previous Positions

- 2001-2002 Fellow, CERN, Geneva, Switzerland
1999-2002 Associate Professor “Young Researchers Program”, Department of Theoretical Physics, University of the Basque Country, Spain
1998-1999 Senior Research Assistant, Dept. of Mathematical Sciences, Durham University
1996-1997 Postdoctoral researcher, Physics Department, UC Santa Barbara

Invited Visiting Professorship: Spring-Summer 2014, Yukawa Institute of Theoretical Physics, Kyoto
November 2016, Kobayashi-Maskawa Institute, Nagoya

Awards: 2016 – ERC Advanced Grant “A New Strategy for Gravity and Black Holes”

PhD students supervised: 8 PhDs completed + 3 ongoing

- Pau Figueras. PhD 2007. Stephen Hawking Fellow at Cambridge. Professor at Queen Mary U. London. Recipient of ERC-2014-Starting Grant
- María J. Rodríguez. PhD 2008. Assistant Prof at Utah State U. and RyC Fellow at IFT, Madrid
- Joan Camps. PhD 2010. Senior Quantum Scientist at Riverlane, Cambridge
- Nidal Haddad. PhD 2012. Faculty member at Bethlehem University, Palestine
- Adriana Di Dato. PhD 2015. Big Data analyst at Datadreams & TSD Consulting
- Alessandro Maccarrone. PhD 2016. Teacher at High School “Col·legi Casp”, Barcelona
- Marina Martínez. PhD 2016. Postdoc at University of Leuven
- Raimon Luna. PhD 2020. Postdoc at University of Brussels

Postdocs supervised

- Óscar J.C. Días (2007-2009, Marie Curie Fellow)
- Marco Caldarelli (2008-2010)
- Giuseppe Milanesi (2008-2009)
- Kentaro Tanabe (2012-2014, JSPS Fellow)
- Jorge Rocha (2015-2019, Marie Curie Fellow & ERC postdoc)
- Keisuke Izumi (2015-2016)
- Helvi Witek (2016-2017, Marie Curie Fellow)
- Marina Martínez (2016-2017, ERC postdoc)
- Tomás Andrade (2017- , ERC postdoc)
- Jakob Salzer (2018-2019, ERC postdoc)
- Aron Jansen (2018- , ERC postdoc)

- Antonia Micol Frassino (2018- , ERC postdoc)
- Ryotaku Suzuki (2018- , ERC postdoc)
- Edgardo Franzin (2018-2019)
- Benson Way (2019- , ERC postdoc)
- Pinar Kirezli (2019-2020, TÜBİTAK postdoc)

I do not include postdocs from group grants of which I was the PI, but whom I did not work directly with

Teaching activities

- 2004-present: Master's course "Advanced General Relativity", University of Barcelona (this includes the supervision of master's thesis students)
- 2003-2011: Master's course (as visiting professor) "Black holes and Cosmology", University of Zaragoza
- Invited lecturer at 5 International Schools and at 4 research institutes in the last 10 years

Organization of Scientific Meetings

- 2009/2011/2013/2015/2017/2019. Organizer. Benasque workshop *Gravity: New perspectives from Strings and Higher dimensions*, Benasque Center for Science, Spain. This biannual conference has become a main event in the field of Gravitational aspects of String Theory, every year attracting an increasing number of researchers worldwide
- 2019. Organizer. *The vacuum of the Universe IV*, Barcelona, Spain
- 2019. Organizer. *Iberian Strings workshop*, Barcelona, Spain
- 2014. Organizer. Long term Workshop *Holographic vistas on Gravity and Strings*, Yukawa Institute for Theoretical Physics, Kyoto, Japan
- 2013. Organizer. *Spanish Relativity Meeting (ERE 2013)*, Benasque Center for Science, Spain
- 2006. Organizer. Aspen workshop *Recent Advances in Black Hole Physics in String Theory*, Aspen Center for Physics, USA
- 2004. Organizer. *EU-RTN Winter School on Strings, Supergravity and Gauge Theory*, Barcelona, Spain
- I omit all my participations in Scientific Committees (SOC) for conferences and workshops (which I do often and do not keep track of all of them), except for two particularly relevant ones (since this is the major tri-annual event in GR):
2014-2016, and 2020-2022: Scientific Committee Member for *The 21st and 23rd International Conferences on General Relativity and Gravitation (GR21 and GR23)*, 2016, Columbia Univ., New York; 2022, Beijing

Invited plenary talks at major international conferences 2010-2020 (selection)

- Gravity and Cosmology 2010. Kyoto, Japan (2010)
- Forty Years of Black Hole Thermodynamics. Jerusalem, Israel (2012)
- The 20th International Conference on General Relativity and Gravitation (GR20). Warsaw, Poland (2013)
- Black holes and quantum information. Weizmann Institute of Science, Rehovot, Israel (2014)
- Eurostrings 2015. Cambridge, United Kingdom (2015)
- Strings 2015. Bangalore, India (2015)
- 22nd European String Workshop and Final COST MP1210 Conference (Keynote speaker), Milano (2017)
- YKIS2018a Symposium "General Relativity - The Next Generation", Kyoto, Japan (2018)
- CERN TH Institute "Black holes, quantum information, and space-time reconstruction" (2018)
- Beyond Center for Fundamental Concepts in Science "Big Questions series", Arizona State University (2019)
- Weak Gravity and Cosmic Censorship. The Princeton Gravity Initiative, Princeton University (2019)

Institutional Responsibilities

2013 – 2017 Management Committee Member, COST Network Action "The String Theory Universe"

| | |
|-------------|---|
| 2013 – 2017 | Working Group Leader (WG3: Quantum Gravity and Cosmology), COST Network Action “The String Theory Universe” |
| 2010 – 2019 | Management Committee Member of the International Society on General Relativity and Gravitation (ISGRG) |
| 2010 – 2013 | Scientific Secretary of Institute of Cosmos Sciences of U. Barcelona (ICC-UB) |
| 2008 – 2009 | Management Committee Member of Spanish Society for General Relativity (SEGRE) |
| 2009 – 2013 | Vice-president of Spanish Society for General Relativity (SEGRE) |
| 2016 – 2019 | Management Committee Member of Spanish Society for General Relativity (SEGRE) |

Comissions of Trust

| | |
|----------------|---|
| 2019 | Panel Member in the ERC-2019-StG Call for Proposals |
| 2017 | Panel Member in the ERC-2017-StG Call for Proposals |
| 2015 | Panel Member in the ERC-2015-StG Call for Proposals |
| 2013 | Panel Member in the ERC-2013-StG Call for Proposals |
| 2009 – present | Editor of Journal of High Energy Physics |
| 2016 – present | Editor of International Journal of Modern Physics D |
| 2017 | Committee member of the research evaluation of the Physics departments of Universiteit van Amsterdam & Vrije Universiteit Amsterdam |

Research grant referee for: FOM (Holland); ISF (Israel); EPSRC (UK); NSERC (Canada); DFG (Germany); FWO (Belgium); NOW (Holland); US-Israel BSF; SNF (Switzerland); NRF (South Africa); FONDECYT (Chile); Academy of Sciences (Czech Republic); TÜBITAK (Turkey); ANEP (Spain); AGAUR (Catalunya)

Reviewer for PRL, PRD, JHEP, CQG, NPB, PLB, JCAP, JMP, GRG, IJMPA, IJMPD, MPLA, EJPC, JP1

In the last 10 years I have been on 25 PhD Examination Panels (Spain, France, Denmark, Belgium), 2 Habilitation Committees (France), and I have provided advice to committees for tenure and promotion at many institutions including DAMTP (Cambridge), Edinburgh, UC Santa Barbara, and Perimeter Institute

Other

122 published articles

13970 citations

h-index = 59

(Source: Google Scholar on 07/01/2021 <https://scholar.google.es/citations?user=iC8NG3EAAAAJ>)

In the last 10 years:

54 plenary and invited talks at conferences

12 invited colloquia

40 invited seminar talks

6 leader of discussion sessions at workshops

61 public outreach events

1 science divulgation book “Iluminando el lado oscuro del Universo” (Ed. Ariel-Planeta, 2018)

<https://www.planetadelibros.com/libro-iluminando-el-lado-oscuro-del-universo/262461>

Brief overview of my career

Originally hailing from a relatively little known institution and having had to struggle largely on my own during much of my PhD, I think it is fair to say that I was a late bloomer. A positive side effect was that I could (*had to*) develop a habit of independent thinking and of pursuing projects of my own. Thus, it was only four years after my PhD that I began to attain a degree of prominence in the field. Among my most substantial work I highlight the following:

-In 1999 I (with Chamblin, Johnson, and Myers) made a seminal contribution to the celebrated holographic duality in quantum gravity that had been discovered by Maldacena less than two years earlier. This work launched the study of charged black holes in anti-deSitter spacetime and set the basis for the huge number of subsequent studies of the properties of dual plasmas at finite number density, such as are present in QCD.

-My major discovery (with Reall) in 2002 of a qualitatively new class of black hole – the black ring, a new solution to Einstein's theory in five dimensions – spearheaded the study of the possibilities for black holes in higher-dimensional theories of the kind that String Theory predicts. In the subsequent decade I made further crucial contributions to shaping the development of this field.

-In 2013 I (with PhD student Suzuki and postdoc Tanabe) initiated another, more original and more ambitious program to solve General Relativity and black hole physics by employing the number of spacetime dimensions as an expansion parameter. This proposal, as well as its potential to further our understanding of gravity and black holes, were recognized by the European Research Council with the award of a prestigious Advanced Grant in 2016.

In addition, I have shown an earnest commitment to meaningfully return to society its investment on basic science. In recent years I have developed an intense activity of outreach – in public talks, press and other media, and in particular with my general-audience book “Iluminando el lado oscuro del Universo – Agujeros negros, ondas gravitatorias y otras melodías de Einstein”, published in 2018 by a major editorial house (Ariel-Planeta). With this, I not only try to convey to the general public the excitement of the historic discovery in 2016 of the gravitational waves from a collision of two black holes – I am also advocating for the importance of basic research in a modern society, and instilling in youths the enthusiasm for science.

Ten most representative publications

- **R Emparan**, HS Reall. "A rotating black ring solution in five dimensions"
Physical Review Letters (2002) 88, 101101. *1069 citations*
- A Chamblin, **R Emparan**, CV Johnson, RC Myers. "Charged AdS black holes and catastrophic holography"
Physical Review (1999) D60, 064018. *1117 citations*
- **R Emparan**, HS Reall. "Black holes in higher dimensions"
Living Reviews in Relativity (2008) 11, 6. *709 citations*
- **R Emparan**, CV Johnson, RC Myers. "Surface terms as counterterms in the AdS-CFT correspondence"
Physical Review (1999) D60, 104001. *681 citations*
- **R Emparan**, GT Horowitz, RC Myers, "Black holes radiate mainly on the brane"
Physical Review Letters (2000) 85, 499. *511 citations*
- **R Emparan**, GT Horowitz, RC Myers. "Exact description of black holes on branes"
Journal of High Energy Physics (2000) 01, 007. *375 citations*
- H Elvang, **R Emparan**, D Mateos, HS Reall. "A supersymmetric black ring"
Physical review letters (2004) 93, 211302. *348 citations*
- **R Emparan**. "Rotating circular strings, and infinite non-uniqueness of black rings"
Journal of High Energy Physics (2004) 03, 064. *287 citations*
- **R Emparan**, RC Myers. "Instability of ultra-spinning black holes"
Journal of High Energy Physics (2003) 09, 025. *276 citations*
- **R Emparan**, R Suzuki, K Tanabe. "The large D limit of General Relativity"
Journal of High Energy Physics (2013). 1306:009. *176 citations*

(citation source: Google Scholar 07/01/2021 <https://scholar.google.es/citations?user=iC8NG3EAAAJ>)

Curriculum Vitae – Extended

7 Jan 2021

Surnames: Emparan García de Salazar

Name: Roberto Alejandro

Gender: Male

ID number: 16045699W

Date of Birth: 11/02/1967

ORCID Code: 0000-0003-2457-0203

Current professional status: ICREA Research Professor, since 7 January 2003

Organization: Universitat de Barcelona

Center: Facultat de Física & Institut de Ciències del Cosmos

Department: Física Quàntica i Astrofísica

Postal Address: Dep. Física Quàntica i Astrofísica, Martí i Franquès 1, Barcelona - 08028

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Academic Studies

Licenciado en Ciencias - Físicas
Universidad del País Vasco
30/06/1990

Ph.D. in Physics
Universidad del País Vasco
23/11/1995
Title: Aspectos cuánticos de agujeros negros: procesos de nucleación espontánea y correcciones cuánticas a la entropía
Supervisor: Juan Luis Mañes Palacios

Previous Positions

Predoctoral fellow
Dep Física Materia Condensada, Universidad del País Vasco
01/09/1991 - 31/12/1995

Postdoctoral researcher
Physics Dept, U. of California-Santa Barbara (USA)
01/01/1996 - 31/12/1997

Senior Research Assistant
Dept of Mathematics/CPT, University of Durham (UK)
01/01/1998 - 30/09/1999

Profesor Asociado (Tiempo Completo)
Dep Física Teórica e H.C., Universidad del País Vasco
15/02/1999 - 30/09/2002

Fellow
Theory Division, CERN (Geneva, Switzerland)
01/01/2001 - 31/12/2002

Journal Publications

1) Heat kernels and thermodynamics in Rindler space

By R. Emparan.

hep-th/9407064.

10.1103/PhysRevD.51.5716.

Phys.Rev. D51 (1995) 5716-5719.

2) Double scaling limit of the superVirasoro constraints

By Luis Alvarez-Gaume, K. Becker, M. Becker, R. Emparan, J. Manes.

hep-th/9207096.

10.1142/S0217751X93000916.

Int.J.Mod.Phys. A8 (1993) 2297-2332.

3) Three loop calculation of the anyonic full cluster expansion

By R. Emparan, M.A. Valle Basagoiti.

hep-th/9304103.

10.1142/S0217732393002221.

Mod.Phys.Lett. A8 (1993) 3291-3300.

4) On quantum black hole entropy and Newton constant renormalization

By J.L.F. Barbon, R. Emparan.

hep-th/9502155.

10.1103/PhysRevD.52.4527.

Phys.Rev. D52 (1995) 4527-4539.

5) Pair creation of black holes joined by cosmic strings

By R. Emparan.

gr-qc/9506025.

10.1103/PhysRevLett.75.3386.

Phys.Rev.Lett. 75 (1995) 3386-3389.

6) Correlations between black holes formed in cosmic string breaking

By R. Emparan.

gr-qc/9507002.

10.1103/PhysRevD.52.6976.

Phys.Rev. D52 (1995) 6976-6981.

7) Massless black hole pairs in string theory

By R. Emparan.

hep-th/9607102.

10.1016/0370-2693(96)01097-0.

Phys.Lett. B387 (1996) 721-726.

8) Bubbles in Kaluza-Klein theories with space - like or time - like internal dimensions

By A. Chamblin, R. Emparan.

hep-th/9607236.

10.1103/PhysRevD.55.754.

Phys.Rev. D55 (1997) 754-765.

9) Composite black holes in external fields

By Roberto Emparan.

hep-th/9610170.

10.1016/S0550-3213(97)00119-3.

Nucl.Phys. B490 (1997) 365-390.

10) Black holes as fundamental strings: Comparing the absorption of scalars

By Roberto Emparan.

hep-th/9704204.

10.1103/PhysRevD.56.3591.

Phys.Rev. D56 (1997) 3591-3599.

11) Can extreme black holes have (long) Abelian Higgs hair?

By A. Chamblin, J.M.A. Ashbourn-Chamblin, R. Emparan, A. Sornborger.

gr-qc/9706004.

10.1103/PhysRevD.58.124014.

Phys.Rev. D58 (1998) 124014.

12) Abelian Higgs hair for extreme black holes and selection rules for snapping strings

By A. Chamblin, J.M.A. Ashbourn-Chamblin, R. Emparan, A. Sornborger.

gr-qc/9706032.

10.1103/PhysRevLett.80.4378.

Phys.Rev.Lett. 80 (1998) 4378-4381.

13) Absorption of scalars by extended objects

By Roberto Emparan.

hep-th/9706204.

10.1016/S0550-3213(98)00076-5.

Nucl.Phys. B516 (1998) 297-314.

14) Born-Infeld strings tunneling to D-branes

By Roberto Emparan.

hep-th/9711106.

10.1016/S0370-2693(98)00107-5.

Phys.Lett. B423 (1998) 71-78.

15) Extreme black holes won't wear long hair

By A. Chamblin, R. Emparan, A. Sornborger, J.M.A. Ashbourn-Chamblin.

16) AdS membranes wrapped on surfaces of arbitrary genus

By Roberto Emparan.

hep-th/9804031.

10.1016/S0370-2693(98)00625-X.

Phys.Lett. B432 (1998) 74-82.

17) Superconducting p-branes and extremal black holes

By A. Chamblin, R. Emparan, G.W. Gibbons.

hep-th/9806017.

10.1103/PhysRevD.58.084009.

Phys.Rev. D58 (1998) 084009.

18) Quantization of AdS(3) black holes in external fields

By Roberto Emparan, Ivo Sachs.

hep-th/9806122.

10.1103/PhysRevLett.81.2408.

Phys.Rev.Lett. 81 (1998) 2408-2411.

19) Large N phases, gravitational instantons and the nuts and bolts of AdS holography

By Andrew Chamblin, Roberto Emparan, Clifford V. Johnson, Robert C. Myers.

hep-th/9808177.

10.1103/PhysRevD.59.064010.

Phys.Rev. D59 (1999) 064010.

20) Vortices and extreme black holes: The Question of flux expulsion

By Filipe Bonjour, Roberto Emparan, Ruth Gregory.

gr-qc/9810061.

10.1103/PhysRevD.59.084022.

Phys.Rev. D59 (1999) 084022.

21) Charged AdS black holes and catastrophic holography

By Andrew Chamblin, Roberto Emparan, Clifford V. Johnson, Robert C. Myers.

hep-th/9902170.

10.1103/PhysRevD.60.064018.

Phys.Rev. D60 (1999) 064018.

22) Surface terms as counterterms in the AdS / CFT correspondence

By Roberto Emparan, Clifford V. Johnson, Robert C. Myers.

hep-th/9903238.

10.1103/PhysRevD.60.104001.

Phys.Rev. D60 (1999) 104001.

23) Holography, thermodynamics and fluctuations of charged AdS black holes

By Andrew Chamblin, Roberto Emparan, Clifford V. Johnson, Robert C. Myers.

hep-th/9904197.

10.1103/PhysRevD.60.104026.

Phys.Rev. D60 (1999) 104026.

24) AdS / CFT duals of topological black holes and the entropy of zero energy states

By Roberto Emparan.

hep-th/9906040.

10.1088/1126-6708/1999/06/036.

JHEP 9906 (1999) 036.

25) Black diholes

By Roberto Emparan.

hep-th/9906160.

10.1103/PhysRevD.61.104009.

Phys.Rev. D61 (2000) 104009.

26) Composite diholes and intersecting brane - anti-brane configurations in string / M theory

By Auttakit Chatrabhuti, Roberto Emparan, Anne Taormina.

hep-th/9911007.

10.1016/S0550-3213(00)00009-2.

Nucl.Phys. B573 (2000) 291-313.

27) Exact description of black holes on branes

By Roberto Emparan, Gary T. Horowitz, Robert C. Myers.

hep-th/9911043.

10.1088/1126-6708/2000/01/007.

JHEP 0001 (2000) 007.

28) Exact description of black holes on branes. 2. Comparison with BTZ black holes and black strings

By Roberto Emparan, Gary T. Horowitz, Robert C. Myers.

hep-th/9912135.

10.1088/1126-6708/2000/01/021.

JHEP 0001 (2000) 021.

29) Black holes radiate mainly on the brane

By Roberto Emparan, Gary T. Horowitz, Robert C. Myers.
hep-th/0003118.
10.1103/PhysRevLett.85.499.
Phys.Rev.Lett. 85 (2000) 499-502.

30) Black hole radiation on and off the brane

By Roberto Emparan.
hep-th/0009136.
PoS tmr2000 (2000) 019.

31) Black holes on thick branes

By Roberto Emparan, Ruth Gregory, Caroline Santos.
hep-th/0012100.
10.1103/PhysRevD.63.104022.
Phys.Rev. D63 (2001) 104022.

32) Selfgravity of brane worlds: A New hierarchy twist

By Christos Charmousis, Roberto Emparan, Ruth Gregory.
hep-th/0101198.
10.1088/1126-6708/2001/05/026.
JHEP 0105 (2001) 026.

33) Exact gravitational shock waves and Planckian scattering on branes

By Roberto Emparan.
hep-th/0104009.
10.1103/PhysRevD.64.024025.
Phys.Rev. D64 (2001) 024025.

34) Macroscopic and microscopic description of black diholes

By Roberto Emparan, Edward Teo.
hep-th/0104206.
10.1016/S0550-3213(01)00319-4.
Nucl.Phys. B610 (2001) 190-214.

35) Tubular branes in fluxbranes

By Roberto Emparan.
hep-th/0105062.
10.1016/S0550-3213(01)00332-7.
Nucl.Phys. B610 (2001) 169-189.

36) Supergravity supertubes

By Roberto Emparan, David Mateos, Paul K. Townsend.
hep-th/0106012.
10.1088/1126-6708/2001/07/011.
JHEP 0107 (2001) 011.

37) String balls at the LHC and beyond

By Savas Dimopoulos, Roberto Emparan.
hep-ph/0108060.
10.1016/S0370-2693(01)01525-8.
Phys.Lett. B526 (2002) 393-398.

38) Cosmic rays as probes of large extra dimensions and TeV gravity

By Roberto Emparan, Manuel Masip, Riccardo Rattazzi.
hep-ph/0109287.

10.1103/PhysRevD.65.064023.

Phys. Rev. D65 (2002) 064023.

39) Generalized Weyl solutions

By Roberto Emparan, Harvey S. Reall.
hep-th/0110258.

10.1103/PhysRevD.65.084025.

Phys. Rev. D65 (2002) 084025.

40) A Rotating black ring solution in five-dimensions

By Roberto Emparan, Harvey S. Reall.
hep-th/0110260.

10.1103/PhysRevLett.88.101101.

Phys. Rev. Lett. 88 (2002) 101101.

41) From p-branes to fluxbranes and back

By Roberto Emparan, Michael Gutperle.
hep-th/0111177.

10.1088/1126-6708/2001/12/023.

JHEP 0112 (2001) 023.

42) Quantum black holes as holograms in AdS brane worlds

By Roberto Emparan, Alessandro Fabbri, Nemanja Kaloper.
hep-th/0206155.

10.1088/1126-6708/2002/08/043.

JHEP 0208 (2002) 043.

43) Black hole astrophysics in AdS brane worlds

By Roberto Emparan, Juan Garcia-Bellido, Nemanja Kaloper.
hep-th/0212132.

10.1088/1126-6708/2003/01/079.

JHEP 0301 (2003) 079.

44) Black hole production at a TeV

By Roberto Emparan.
hep-ph/0302226.

45) A Note on accelerating cosmologies from compactifications and S branes

By Roberto Emparan, Jaume Garriga.
hep-th/0304124.

10.1088/1126-6708/2003/05/028.

JHEP 0305 (2003) 028.

46) Instability of ultra-spinning black holes

By Roberto Emparan, Robert C. Myers.
hep-th/0308056.

10.1088/1126-6708/2003/09/025.

JHEP 0309 (2003) 025.

47) Black rings, supertubes, and a stringy resolution of black hole nonuniqueness

By Henriette Elvang, Roberto Emparan.
hep-th/0310008.

10.1088/1126-6708/2003/11/035.

JHEP 0311 (2003) 035.

48) Rotating circular strings, and infinite nonuniqueness of black rings

By Roberto Emparan.

hep-th/0402149.

10.1088/1126-6708/2004/03/064.

JHEP 0403 (2004) 064.

49) A Supersymmetric black ring

By Henriette Elvang, Roberto Emparan, David Mateos, Harvey S. Reall.

hep-th/0407065.

10.1103/PhysRevLett.93.211302.

Phys.Rev.Lett. 93 (2004) 211302.

50) Supersymmetric black rings and three-charge supertubes

By Henriette Elvang, Roberto Emparan, David Mateos, Harvey S. Reall.

hep-th/0408120.

10.1103/PhysRevD.71.024033.

Phys.Rev. D71 (2005) 024033.

51) Non-supersymmetric black rings as thermally excited supertubes

By Henriette Elvang, Roberto Emparan, Pau Figueras.

hep-th/0412130.

10.1088/1126-6708/2005/02/031.

JHEP 0502 (2005) 031.

52) Supersymmetric 4-D rotating black holes from 5-D black rings

By Henriette Elvang, Roberto Emparan, David Mateos, Harvey S. Reall.

hep-th/0504125.

10.1088/1126-6708/2005/08/042.

JHEP 0508 (2005) 042.

53) Oscillator level for black holes and black rings

By Roberto Emparan, David Mateos.

hep-th/0506110.

10.1088/0264-9381/22/17/016.

Class.Quant.Grav. 22 (2005) 3575-3584.

54) Non-perturbative materialization of ghosts

By Roberto Emparan, Jaume Garriga.

hep-th/0512274.

10.1088/1126-6708/2006/03/028.

JHEP 0603 (2006) 028.

55) Black hole entropy as entanglement entropy: A Holographic derivation

By Roberto Emparan.

hep-th/0603081.

10.1088/1126-6708/2006/06/012.

JHEP 0606 (2006) 012.

56) Microstates of a Neutral Black Hole in M Theory

By Roberto Emparan, Gary T. Horowitz.

hep-th/0607023.

10.1103/PhysRevLett.97.141601.

Phys.Rev.Lett. 97 (2006) 141601.

57) Black Rings

By Roberto Emparan, Harvey S. Reall.

hep-th/0608012.

10.1088/0264-9381/23/20/R01.

Class.Quant.Grav. 23 (2006) R169.

58) Dynamics and stability of black rings

By Henriette Elvang, Roberto Emparan, Amitabh Virmani.
hep-th/0608076.

10.1088/1126-6708/2006/12/074.

JHEP 0612 (2006) 074.

59) Statistical description of rotating Kaluza-Klein black holes

By Roberto Emparan, Alessandro Maccarrone.
hep-th/0701150.

10.1103/PhysRevD.75.084006.

Phys.Rev. D75 (2007) 084006.

60) Phases of five-dimensional black holes

By Henriette Elvang, Roberto Emparan, Pau Figueras.
hep-th/0702111.

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Ph.D. Theses Supervised

Title: Aspectes clàssics i quàntics de forats negres en diverses dimensions

Author: Pau Figueras Barnera

University: Universitat de Barcelona

Year: 2007 **Mark:** Excellent Cum Laude and Extraordinary Award

Title: Objetos negros en más de cuatro dimensiones

Author: Rodríguez, M.J.

University: Universitat de Barcelona

Year: 2008 **Mark:** Excellent Cum Laude

Title: Exact and approximate methods in gravity in diverse dimensions

Author: Joan Camps Barjau

University: Universitat de Barcelona

Year: 2010 **Mark:** Excellent Cum Laude

Title: Black holes: New perspectives from higher-dimensions

Author: Haddad, N.

University: Universitat de Barcelona

Year: 2012 **Mark:** Excellent Cum Laude

Title: Correspondences in higher-dimensional gravity

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Title: Microscopic analysis of rotating Black Holes

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University: Universitat de Barcelona

Year: 2016 **Mark:** Excellent Cum Laude

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Author: Martínez Montero, Marina

University: Universitat de Barcelona

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Title: New Strategies for Black Hole Physics

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Year: 2020 **Mark:** Excellent Cum Laude

Master's Theses Supervised

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Year: 2004 **Mark:** Excellent

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Author: Diego Blas Temiño

Year: 2004 **Mark:** Excellent

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Year: 2011 **Mark:** Excellent

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Year: 2012 **Mark:** Excellent

Title: Black holes in the limit of very many dimensions

Author: Joan García Tormo

Year: 2015 **Mark:** Excellent

Title: Dynamics of neutral and charged black p-branes at large D

Author: Raimon Luna

Year: 2016 **Mark:** Excellent

Title: Love numbers in AdS/CFT

Author: Alejandro Fernández Piqué

Year: 2017 **Mark:** Excellent

Title: Event horizon of the fusion of two black holes

Author: Anabel Díaz Gutiérrez

Year: 2017 **Mark:** Good

Title: Effective theory of black branes and their stability in a large number of dimensions

Author: Juan Carlos Morales Vega

Year: 2018 **Mark:** Excellent

Title: Merger of two black holes in the extreme mass ratio limit.

Author: Begoña Mula Martín

Year: 2018 **Mark:** Good

Title: Event Horizon of a Black Hole Merger

Author: Anna Argudo Boter

Year: 2019 **Mark:** Excellent

Title: Spacetime thermodynamics and entanglement entropy: the Einstein field equations

Author: Martí Berenguer Mimó

Year: 2019 **Mark:** Excellent

Title: Evolution of Black Branes in the Limit of a Large Number of Dimensions

Author: Bela Indurkhy Nelson

Year: 2019 **Mark:** Excellent

Title: Event horizon in a compact binary coalescence

Author: Daniel Marín Pina

Year: 2020 **Mark:** Excellent (Honors)

Teaching

Advanced course 'Brane-World Black Holes and Holography', Research Semester 2003.

14/07/2003 - 18/07/2003

Graduate Course

Feza Gürsey Institute, Estambul

Advanced course 'Black Holes on Branes',

22/09/2003 - 30/09/2003

Graduate Course

Second Aegean Summer School on the Early Universe, Ermoupoli

"Gravedad y Cosmología de Cuerdas y Branas' (2 créditos).

22/05/2003 - 30/05/2003

Graduate Course

Universidad de Zaragoza

"Gravedad y Cosmología de Cuerdas y Branas' (2 créditos).

31/05/2004 - 04/06/2004

Graduate Course

Universidad de Zaragoza

"Beyond the Standard Model: Black Holes"

14/09/2004 - 18/09/2004

Graduate Course

Taller de Altas Energías 2004, Santiago de Compostela

"Cosmología" (2 créditos).

13/06/2005 - 17/06/2005

Graduate Course

Universidad de Zaragoza

"Advanced General Relativity" (3 credits).

04/10/2005 - 21/10/2005

Teaching in third cycle

Universidad de Barcelona

"Agujeros negros y Cosmología" (2 créditos).

05/06/2006 - 09/06/2006

Graduate Course

Universidad de Zaragoza

Lectures (2x2h) on "Black Rings"

23/04/2007 - 24/04/2007

Courses and Seminars

Galileo Galilei Institute for Theoretical Physics

"Agujeros negros y Cosmología" (2 créditos).

04/06/2007 - 08/06/2007

Graduate Course

Universidad de Zaragoza

'Black Holes in Higher Dimensions', at Spring School on Superstring Theory and Related Topics

27/03/2008 - 04/04/2008

"Agujeros negros y Cosmología" (2 créditos).

19/05/2008 - 23/05/2008

Graduate Course

Universidad de Zaragoza

'Black Holes in Higher Dimensions'

28/04/2008 - 30/04/2008

Dept. Física Teórica, Universidad del País Vasco

Master's course "Advanced General Relativity" (3 credits).

14/10/2006 - 14/02/2007

Teaching in third cycle

Universidad de Barcelona

Master's course "Advanced General Relativity" (3 credits).

14/10/2007 - 14/02/2008

Teaching in third cycle

Universidad de Barcelona

Master's course "Advanced General Relativity" (3 credits).

14/10/2008 - 14/02/2009

Teaching in third cycle

Universidad de Barcelona

The 3rd Asian Winter School on String Theory -- Black Holes in Higher Dimensions

12/01/2009 - 17/01/2009

Kavli Institute of Theoretical Physics in China, Beijing

"Agujeros negros y Cosmología" (2 créditos).

25/05/2009 - 29/05/2009

Graduate Course

Universidad de Zaragoza

Master's course "Advanced General Relativity" (3 credits).

14/10/2009 - 14/02/2010

Teaching in third cycle

Universidad de Barcelona

Advanced General Relativity and Black Holes in String Theory

16/11/2009 - 24/11/2009

Graduate Course

Amsterdam-Brussels-Paris Solvay Doctoral School

"Classical, quantum and stringy perspectives on black holes"

10/03/2011 - 01/04/2011

Graduate Course

Doctoral Program in Physics of Conférence Universitaire de Suisse Occidentale

"Agujeros negros y Cosmología" (2 créditos).

31/05/2010 - 04/06/2010

Graduate Course

Universidad de Zaragoza

Master's course 'Advanced General Relativity' (3 credits)

14/10/2010 - 14/02/2011

Teaching in third cycle

Universidad de Barcelona

"Branes in black hole physics"

15/02/2010 - 19/02/2010

Graduate Course

Instituto de Física Teórica, Universidad Autónoma de Madrid

International School On Strings And Fundamental Physics -- Black holes

26/07/2010 - 31/07/2010

Graduate Course

Excellence Cluster 'Universe' (Technische Universität München etc)

"Agujeros negros y Cosmología" (2 créditos).

30/05/2011 - 07/06/2011

Graduate Course

Universidad de Zaragoza

Master's course 'Advanced General Relativity' (3 credits).

14/10/2011 - 14/02/2012

Teaching in third cycle

Universidad de Barcelona

'Classical, quantum and stringy perspectives on black holes' (EPF Lausanne)

10/03/2011 - 31/03/2011

Graduate Course

Doctoral Program in Physics of the Conférence Universitaire de Suisse Occidentale

Master's course 'Advanced General Relativity' (30 hrs).

11/02/2013 - 20/03/2013

Teaching in third cycle

Universidad de Barcelona

"Classical, quantum and stringy perspectives on black holes"

02/06/2014 - 16/06/2014

Graduate Course

Kyoto University

Lectures on large D gravity (3 hrs)

14/06/2014 - 14/06/2014

Teaching in third cycle

Department of Physics, Osaka University

Master's course 'Advanced General Relativity' (30 hrs).

10/02/2014 - 19/03/2014

Universitat de Barcelona

Master's course 'Advanced General Relativity' (30 hrs).

16/02/2015 - 24/03/2015

Universitat de Barcelona

Master's course 'Advanced General Relativity' (30 hrs).

15/02/2016 - 29/03/2016

Universitat de Barcelona

Summer course 'Agujeros negros' in 'La relativitat d'Einstein, cent anys després', Els Juliol de la UB

07/07/2016 - 07/07/2016

Universitat de Barcelona

Master's course 'Advanced General Relativity' (30 hrs).

13/02/2017 - 29/03/2017

Universitat de Barcelona

Graduate lectures 'Black hole physics' (9 hrs).

22/01/2018 - 27/03/2018

Asia Pacific Center for Theoretical Physics (APCTP), South Korea

Master's course 'Advanced General Relativity' (30 hrs).

12/02/2018 - 04/04/2018

Universitat de Barcelona

Master's course 'Advanced General Relativity' (30 hrs).

11/02/2019 - 27/03/2019

Universitat de Barcelona

Conference Contributions

Title: Gravity and Black Holes in Brane-World Models

Invited conference

Terceros Encuentros de Física Teórica Sitges 2000

Sitges SPAIN 2000

Title: The role of exact solutions in string theory (invited review talk)

Invited conference

GR16 - 16th Conference of the International Society on General Relativity and Gravitation

Durban SOUTH AFRICA 2001

Title: Holographic description of black holes

Invited conference

ESF/PESC exploratory workshop on Quantum Information and Spacetime Structure

Madrid SPAIN 2001

Title: Black Holes and String Balls at a TeV

Invited conference

Euro-GDR Meeting

Durham UNITED KINGDOM 2002

Title: More is Different: Black Holes in Higher Dimensions

Invited conference

XXV Spanish Relativity Meeting

Mahón SPAIN 2002

Title: Black Hole production at a TeV

Invited conference

12th Japanese Meeting on General Relativity and Gravitation

Tokyo JAPAN 2002

Title: Black Rings

Invited conference

XXVII Spanish Relativity Meeting

Miraflores de la Sierra, Madrid SPAIN 2004

Title: Quantum black hole entropy and Newton constant renormalization

Presentation of communication

Workshop on String Theory, Gauge Theory and Quantum Gravity, ICTP

Trieste ITALY 1995

Title: Radiation from AdS_3 black holes (without strings)

Presentation of communication

XIXth Meeting of the UK Institute of High Energy Physics

Oxford ENGLAND 1998

Title: Radiation from AdS_3 black holes (without strings)

Presentation of communication

Annual European TMR conference on Integrability, non-perturbative effects, and symmetry in quantum field theory

Durham ENGLAND 1998

Title: Radiation from AdS_3 black holes (without strings)

Presentation of communication

IV IFT-UAM Christmas Workshop on Particle Physics
Madrid SPAIN 1998

Title: Microscopic theory of black hole thermodynamics, using the AdS/CFT Correspondence
Presentation of communication
Encuentros Relativistas Españoles 1999,
Bilbao SPAIN 1999

Title: Black Holes on Brane-Worlds
Presentation of communication
V IFT-UAM Christmas Workshop on Particle Physics
Madrid SPAIN 1999

Title: Black Hole Radiation On and Off the Brane
Invited conference
Non-Perturbative Quantum Effects 2000
Paris FRANCE 2000

Title: Rotating black holes in higher dimensions
Presentation of communication
GR16 -- 16th Conference of the International Society on General Relativity and Gravitation
Durban SOUTH AFRICA 2001

Title: String balls at the LHC and beyond
Invited conference
VII IFT-UAM Christmas Workshop on Particle Physics
Madrid SPAIN 2001

Title: Quantum Black Holes as Holograms
Invited conference
Pre-Strings 2002
Durham ENGLAND 2002

Title: Black Hole Astrophysics in AdS Braneworlds
Presentation of communication
5eme Journee des Lacs Alpins de Cosmologie
Annecy FRANCE 2002

Title: Black Hole Astrophysics in AdS Braneworlds
Invited conference
8th Itzykson Meeting: Which Model(s) For the Early Universe?
Saclay, Paris FRANCE 2003

Title: Nutty Black Rings and 4D Black Holes
Invited conference
Gravitational Aspects of String Theory, May 2-6, 2005 at Fields Institute
Toronto CANADA 2005

Title: El principio holográfico en gravedad cuántica
Invited conference
Trobada conjunta Societat Catalana de Matemàtiques-Societat Catalana de Física
Barcelona SPAIN 2005

Title: Dynamics and Stability of Black Rings

Invited conference
WORKSHOP ON BLACK HOLES, BLACK RINGS AND TOPOLOGICAL STRINGS, Arnold Sommerfeld Center for Theoretical Physics,
Munich, 31 Mar – 4 Apr 2006
Munich GERMANY 2006

Title: Black Hole Entropy as Entanglement Entropy: A Holographic Derivation
Invited conference
Cosmology, Strings, and Black Holes 2006 18-21 Abril 2006 Nordita and Niels Bohr Institute
Copenhagen DENMARK 2006

Title: Microstates of a neutral black hole
Invited conference
Recent Advances in Black Hole Physics in String Theory Aspen Center for Physics, August 21 - September 10
Aspen UNITED STATES 2006

Participation in organizer committee
Recent Advances in Black Hole Physics in String Theory Aspen Center for Physics, August 21 - September 10
Aspen UNITED STATES 2006

Title: Einstein in Mordor: Black Rings in Higher-Dimensional Gravity
Invited conference
Andrew Chamblin Memorial Conference, Trinity College, Cambridge 14 Oct 2006
Cambridge UNITED KINGDOM 2006

Title: Einstein in Mordor: Black Rings in Higher-Dimensional Gravity
Invited conference
GeNeZISS Meeting, CERN, November 20, 2006
Geneva SWITZERLAND 2006

Title: Phases of Five-Dimensional Black Holes
Invited conference
Einstein's Gravity in Higher Dimensions, February 17-23, 2007
Jerusalem ISRAEL 2007

Title: Future directions in higher-dimensional gravity
Invited conference
Einstein's Gravity in Higher Dimensions, February 17-23, 2007
Jerusalem ISRAEL 2007

Title: Phases of higher-dimensional black holes
Invited conference
Strings 2007
Madrid SPAIN 2007

Title: Black holes galore in D>4
Invited conference
XXXVIIth Paris Summer Institute on Black Holes, Black Rings and Modular Forms
Paris FRANCE 2007

Title: Black holes galore in D>4
Invited conference
3rd RTN Workshop 'Constituents, Fundamental Forces and Symmetries of the Universe'
Valencia SPAIN 2007

Title: Open Issues in the Classification and Characterization of Higher-Dimensional Black Holes

Invited conference

Conference on Mathematical Aspects of General Relativity

Copenhagen DENMARK 2008

Title: New Phases of Higher Dimensional Black Holes

Invited conference

Gravitational Thermodynamics and the Quantum Nature of Space Time, International Centre for Mathematical Sciences

Edinburgh SCOTLAND 2008

Title: Black Holes in Braneworlds

Relevant contribution

Quantum Black Holes, Braneworlds and Holography, May 12-16, 2008

Valencia SPAIN 2008

Title: Discussion Session: Open Issues in Higher-Dimensional Gravity

Round table

Monsoon Workshop on String Theory

Mumbai INDIA 2008

Title: Black holes in higher dimensions (I and II)

Invited conference

Black Holes: A Landscape of Theoretical Physics Problems

Geneva SWITZERLAND 2008

Title: New Phases of Black Holes in Higher Dimensions

Invited conference

18th Workshop on General Relativity and Gravitation in Japan (JGRG 18)

Hiroshima JAPAN 2008

Title: Blackfolds

Invited conference

Taiwan Workshop on String Theory

Taipei CHINA TAIWAN 2009

Title: Blackfolds

Invited conference

The directions of Modern Cosmology

Barcelona SPAIN 2009

Title: Blackfolds

Invited conference

Black Holes VII - Theory and mathematical aspects

Banff CANADA 2009

Title: Blackfolds

Invited conference

14th Itzykson Meeting on String Theory 'Recent Advances in String Theory'

Paris FRANCE 2009

Title: Blackfolds

Invited conference

Spanish Relativity Meeting - ERE 2009

Bilbao SPAIN 2009

Title: Blackfolds: fluid dynamics for higher-dimensional black holes
Invited conference
Dutch National Seminar on High Energy Physics
Amsterdam NETHERLANDS 2009

Title: Blackfolds: fluid dynamics for higher-dimensional black holes
Invited conference
Second Superfields Meeting
Padova ITALY 2009

Chair of organizer committee
Gravity: New perspectives from strings and higher dimensions
Banasque SPAIN 2009

Title: Higher-dimensional black holes
Invited conference
Iberian Strings 2010
Oporto PORTUGAL 2010

Title: Effective worldvolume theory for black branes
Invited conference
Aspects of Gauge/Gravity Duality workshop
Cambridge UNITED KINGDOM 2010

Title: Effective worldvolume theory for black branes
Speech
XVIIth European Workshop on String Theory 2010
Madrid SPAIN 2010

Title: Effective worldvolume theory for black holes and branes
Invited conference
Gravity and Cosmology 2010
Kyoto JAPAN 2010

Title: Effective theory for black branes: basic issues
Invited conference
Black Holes and Higher Dimensions - Imperial College London
London UNITED KINGDOM 2010

Title: Black holes in higher dimensions
Invited conference
III Iberian Mathematical Meeting
Braga PORTUGAL 2010

Title: Black hole stability
Round table
Workshop on black holes, their stability and related topics
Paris FRANCE 2011

Title: Black holes, fluids, and their instabilities
Invited conference
Workshop on black holes, their stability and related topics
Paris FRANCE 2011

Title: Black holes in higher dimensions
Invited conference
Numerical Relativity and High Energy Physics
Funchal, Madeira PORTUGAL 2011

Title: Patterns in the hi-D black hole phase diagram
Relevant contribution
Gravity - New perspectives from strings and higher dimensions
Benesque SPAIN 2011

Title: Critical geometries at horizon intersections and mergers
Invited conference
Black Holes: New Horizons -- Banff International Research Station, 20-26 Nov 2011
Banff CANADA 2011

Title: Fluids from blackfolds
Invited conference
Workshop on Holographic Fluids -- Institute for theoretical physics, University of Amsterdam 8-12 Jan 2012
Amsterdam NETHERLANDS January 2012

Title: Viscous fluid, elastic solid: the effective dynamics of black branes
Invited conference
1st 2012 Miniworkshop on String Theory, Oviedo, 20 Mar 2012
Oviedo SPAIN March 2012

Title: Black brane fluid flows
Invited conference
Branes and Black Holes -- King's College London 27 May-1 Jun 2012
London ENGLAND June 2012

Title: Black Strings and Liquid Jets
Invited conference
Exploring AdS-CFT Dualities in Dynamical Settings - Perimeter Institute, 3-10 Jun 2012
Waterloo CANADA June 2012

Title: Viscous fluid, elastic solid: the effective dynamics of black branes
Invited conference
Forty Years of Black Hole Thermodynamics -- The Israel Institute for Advanced Studies, Jerusalem, 2-7 Sep 2012
Jerusalem ISRAEL September 2012

Title: Black brane fluid flows
Invited conference
Nordita workshop 'The Holographic Way: String Theory, Gauge Theory and Black Holes' -- Stockholm, 15-27 Oct 2012
Stockholm SWEDEN October 2012

Title: The large-D limit of General Relativity
Invited conference
Holography, gauge theory and black holes -- Institute of Physics, University of Amsterdam, 17-19 Dec 2012
Amsterdam NETHERLANDS December 2012

Title: Higher-dimensional black hole solutions: approximate methods
Invited conference
20th International Conference on General Relativity and Gravitation (GR20) and 10th Amaldi Conference on Gravitational Waves
Warsaw POLAND July 2013

Title: The large D limit of General Relativity

Invited conference

String Theory, Black Holes and Holography -- Yukawa Institute for Theoretical Physics, Kyoto, 30 Jun-5 Jul 2013
Kyoto JAPAN June 2013

Title: General Relativity in the limit of very many dimensions

Invited conference

XXII International Fall Workshop on Geometry and Physics -- Evora, 2-5 Sep 2013
Evora PORTUGAL September 2013

Title: The Large D limit of General Relativity

Invited conference

'Mathematics and Physics of the Holographic Principle', Isaac Newton Institute for Mathematical Sciences, Cambridge, 23-28 Sep 2013
Cambridge ENGLAND September 2013

Title: The Large D limit of General Relativity

Invited conference

Models of Gravity Workshop Autumn 2013: Astrophysics and Cosmology, University Bremen, 8-10 Oct 2013
Bremen GERMANY October 2013

Title: Universal features of black holes in the large D limit

Invited conference

'Black holes and quantum information', The Weizmann Institute of Science, 12-17 January 2014
Rehovot ISRAEL January 2014

Title: Universal features of black holes in the large D limit

Invited conference

'New frontiers in dynamical gravity', DAMTP Cambridge, 26/03/2014
Cambridge UNITED KINGDOM March 2014

Title: Aspects of black holes in the large D limit

Invited conference

'Holographic vistas on Gravity and Strings', Yukawa Institute for Theoretical Physics, 11 May-28 July 2014
Kyoto JAPAN May 2014

Title: Aspects of black holes in the large D limit

Invited conference

'Holographic vistas on Gravity and Strings', Yukawa Institute for Theoretical Physics, 11 May-28 July 2014
Kyoto JAPAN May 2014

Title: Black holes in the 1/D expansion

Relevant contribution

BOBS: Black Objects Beyond Supersymmetry, Utrecht, 31 Aug-2 Sep 2014
Utrecht NETHERLANDS August 2014

Title: Discussion session WG3: Quantum gravity and cosmology

Round table

The String Theory Universe 2nd COST MP1210 Meeting and 20th European Workshop on String Theory
Mainz GERMANY September 2014

Title: Theory Overview: Progress and Problems Way Beyond the Standard Model

Invited conference

Title: Black holes in the 1/D expansion
Invited conference
Eurostrings 2015, Cambridge
Cambridge UNITED KINGDOM March 2015

Title: Black holes in the 1/D expansion
Invited conference
Entanglement, Holography and Geometry - Centre International Universitaire pour la Recherche - LE STUDIUM
Orleans FRANCE April 2015

Title: Black holes in the 1/D expansion
Invited conference
'Holographic Methods for Strongly Coupled Systems', Galileo Galilei Institute, Firenze
Firenze ITALY April 2015

Title: Black holes in the limit of very many dimensions
Invited conference
Edinburgh Mathematical Society - Societat Catalana de Matemàtiques Joint Meeting
Barcelona SPAIN May 2015

Title: Black hole stability: large D approach
Invited conference
'Black Hole Stability', Fields Institute, Toronto
Toronto CANADA June 2015

Title: Black Holes in the 1/D expansion
Invited conference
Strings 2015, Bangalore
Bangalore INDIA June 2015

Title: Black holes in the limit of very many dimensions
Invited conference
First Workshop on String Theory and Gender
Valencia SPAIN July 2015

Title: Black holes in the limit of very many dimensions
Invited conference
100 years of curved space time - Austrian Academy of Sciences, Vienna
Vienna AUSTRIA October 2015

Title: Black holes in the 1/D expansion
Invited conference
Iberian Strings 2016 - IFT Madrid
Madrid SPAIN January 2016

Title: Black Holes at Large D: Things we've learned so far
Relevant contribution
21st International Conference on General Relativity and Gravitation (GR21), New York
New York UNITED STATES July 2016

Title: Black hole fusion made easy
Invited conference
Spanish-Portuguese Relativity Meeting, Lisboa
Lisboa PORTUGAL September 2016

Title: Black hole fusion made easy
Invited conference
Current trends in physics - Faculty of Physics, Universidade de Santiago de Compostela
Santiago de Compostela SPAIN September 2016

Title: Black holes at large D: Things we've learned so far
Invited conference
Mini-workshop on Black Holes - Kobayashi-Maskawa Institute, Nagoya University
Nagoya JAPAN November 2016

Title: Black Holes and Quantum Gravity: Overview
Discussion leader
22nd European String Workshop and Final COST MP1210 Conference - Milano
Milano ITALY February 2017

Title: The singularity is near
Invited conference
Workshop on holography, black holes and numerical relativity, STAG Research Centre, Southampton University
Southampton UNITED KINGDOM April 2017

Title: The event horizon of extreme mass-ratio mergers
Invited conference
Iberian Gravitational Wave Meeting 2017
Bilbao SPAIN May 2017

Title: Black hole fusion made easy
Invited conference
Recent Developments in General Relativity, Hebrew University, Jerusalem
Jerusalem ISRAEL May 2017

Title: The singularity is near
Invited conference
Erwin Schrödinger International Institute for Mathematics and Physics - Programme and Workshop 'Quantum Physics and Gravity'
Vienna Austria June 2017

Title: The singularity is near
Presentation of communication
EREPA 2017 - Spanish-Portuguese Relativity Meeting
Malaga SPAIN September 2017

Title: Black hole physics
Invited conference
IX CPAN days - Santander

Santander SPAIN 2017

Title: Remarks on Cosmic Censorship and its Possible Violations
Invited conference
'Quantum black holes in the sky?', Perimeter Institute for Theoretical Physics
Waterloo CANADA 2017

Title: Black hole fusion in the extreme mass ratio limit
Invited conference
YKIS2018a Symposium 'General Relativity - The Next Generation', Yukawa Institute for Theoretical Physics
Kyoto JAPAN February 2018

Title: How the 1/D expansion simplifies black hole physics
Invited conference
'Black holes, quantum information, and space-time reconstruction', CERN
Geneva SWITZERLAND August 2018

Title: Softly colliding black holes
Presentation of communication
EREPA 2018 - Spanish-Portuguese Relativity Meeting
Palencia SPAIN September 2018

Title: Black hole collisions in higher dimensions
Invited conference
Southwest Strings Meeting 2019, Arizona State University
Phoenix, Arizona UNITED STATES February 2019

Title: Cosmic censorship and quantum gravity pixie dust
Invited conference
'Big Questions series', Beyond Center for Fundamental Concepts in Science, Arizona State University
Phoenix, Arizona UNITED STATES February 2019

Title: Cosmic censorship violation and black hole collisions in Hi D
Invited conference
The Gravity Initiative Spring Workshop: Weak Gravity and Cosmic Censorship: Conjectures and Connections - Princeton University
Princeton, New Jersey UNITED STATES 12 April 2019

Title: Remarks on the large-D expansion in gravity
Invited conference
Workshop on Large D gravity - Institute for Theoretical Physics Utrecht
Utrecht NETHERLANDS 27 May 2019

Title: The (near) future of gravitational physics
Discussion panel
EREPA 2019 - Spanish And Portuguese Relativity Meeting, Valencia
Valencia SPAIN 6 July 2019

Title: Of Funnels, Rivers and Trampolines: The Perils of Conveying Spacetime Curvature to the Uninitiated
Presentation of communication
GR22-International Conference on General Relativity and Gravitation, Valencia
Valencia SPAIN 9 July 2019

Title: Cosmic Censorship Violation in Black Hole Collisions in Higher Dimensions
Presentation of communication
GR22-International Conference on General Relativity and Gravitation, Valencia
Valencia SPAIN 12 July 2019

Title: Physics of Cosmic Censorship violations
Discussion leader
"Gravity - New perspectives from strings and higher dimensions", Benasque Center for Science
Banasque SPAIN 16 July 2019

Title: Black holes in the large D limit
Plenary speaker
"Nordita workshop "Challenges in Theoretical High-Energy Physics"
Stockholm SWEDEN 26 September 2019

Title: Exotic compact objects with soft hair
Plenary speaker
"Black Holes and Neutron Stars in Modified Gravity"
Meudon FRANCE 18 November 2019

Title: Recent progress and future prospects in the large-D approach to gravity
Plenary speaker
"Geometry from the Quantum" conference at Kavli Institute for Theoretical Physics, UC Santa Barbara
Santa Barbara USA 16 January 2020

Title: The black hole horizon as a membrane and as a liquid
Plenary speaker
"Spacetime, Holography, and Entanglement" Physics Teachers' Conference at Kavli Institute for Theoretical Physics, UC Santa Barbara
Santa Barbara USA 18 January 2020

Title: Physics of Cosmic Censorship violations
Discussion leader
"Gravitational Holography", Kavli Institute for Theoretical Physics, UC Santa Barbara
Santa Barbara USA 7 February 2020

Seminars and Colloquia

Title: Anyons

Bilbao, SPAIN , 1993

Seminario del Depto. de Física de la Materia Condensada de la UPV-EHU

Title: Black hole entropy and geometric entropy

Bilbao, SPAIN , 1994

Seminario del Depto. de Física Teórica de la UPV-EHU

Title: Infinitos en la termodinámica de agujeros negros

Bilbao, SPAIN , 1994

Seminario del Depto. de Física Teórica de la UPV-EHU

Title: ¿Se pierde información en los agujeros negros?

Bilbao, SPAIN , 1995

Seminario del Depto. de Física de la Materia Condensada de la UPV-EHU

Title: Processes of spontaneous formation of black holes

Sussex, ENGLAND , 05/12/1995

Seminario del Physics Department, Universidad de Sussex

Title: Processes of spontaneous formation of black holes

Durham, ENGLAND , 06/12/1995

Seminario del Mathematics Department, Universidad de Durham

Title: Processes of spontaneous formation of black holes

Londres, ENGLAND , 07/12/1995

Seminario del Physics Department, Imperial College London

Title: Spontaneous formation of black holes

Santa Barbara, California, UNITED STATES , 13/02/1996

Seminario del Physics Department, Imperial College London

Title: Pares de agujeros negros de masa cero en teoría de cuerdas

Bilbao, SPAIN , 08/01/1997

Seminario del Depto. de Física Teórica de la UPV-EHU

Title: La electrodinámica no lineal de Born-Infeld, ayer y hoy

Bilbao, SPAIN , 09/01/1998

Seminario del Depto. de Física Teórica de la UPV-EHU

Title: (Born-Infeld) Strings Tunneling to D-branes

Londres, ENGLAND , 06/02/1998

Seminario del Physics Department, Queen Mary and Westfield College

Title: (Born-Infeld) Strings Tunneling to D-branes

Durham, ENGLAND , 20/02/1998

Seminario del Mathematics Department, Universidad de Durham

Title: (Born-Infeld) Strings Tunneling to D-branes

Cambridge, ENGLAND , 27/02/1998

Title: Radiation from AdS_3 black holes (without strings)
Lexington, Kentucky, UNITED STATES , 08/02/1999
Seminario del Physics Department, University of Kentucky-Lexington

Title: Radiation from AdS_3 black holes (without strings)
Bilbao, SPAIN , 19/02/1999
Seminario del Depto. de Física Teórica de la UPV-EHU

Title: Surface Terms as Counterterms in the AdS/CFT Correspondence
Cambridge, ENGLAND , 05/05/1999
Seminario del DAMTP, Universidad de Cambridge

Title: Microscopic theory of black hole thermodynamics, using the AdS/CFT Correspondence
Southampton, ENGLAND , 31/08/1999
Seminario en BUSSTEPP, University of Southampton

Title: Large N Phases, Gravitational Instantons and the Nuts and Bolts of AdS Holography
Londres, ENGLAND , 04/11/1999
Seminario del Physics Department, Kings College-Londres

Title: Large N Phases, Gravitational Instantons and the Nuts and Bolts of AdS Holography
Swansea, ENGLAND , 01/12/1999
Seminario del Physics Department, University of Wales-Swansea

Title: Brane Worlds and Extra Dimensions vs. Gravity and Black Holes
Santiago de Compostela, SPAIN , 24/02/2000
Seminario del GAES, Universidad de Santiago de Compostela

Title: Por qué y cómo vivir en más de 3+1 dimensiones
Bilbao, SPAIN , 08/03/2000
Seminario de Depto. de Física Teórica, UPV-EHU

Title: Black Holes Radiate Mainly on the Brane
Londres, ENGLAND , 10/05/2000
Seminario del Physics Department, Queen Mary and Westfield College

Title: Black Holes Radiate Mainly on the Brane
Durham, ENGLAND , 19/05/2000
Seminario del Mathematics Department, Universidad de Durham

Title: Aspects of Black Holes in Brane-World Scenarios
Zaragoza, SPAIN , 17/11/2000
Seminario del Depto de Física Teórica, Universidad de Zaragoza

Title: Self-gravity of Brane Worlds and the Hierarchy Problem
Barcelona, SPAIN , 15/02/2001
Seminario del Depto de ECM, Universidad de Barcelona

Title: Self-gravity of Brane Worlds and the Hierarchy Problem
Barcelona, SPAIN , 16/02/2001

Title: Ultra-spinning black holes in higher dimensions
Madrid, SPAIN, 18/04/2001
Seminario del IFT-Universidad Autónoma de Madrid

Title: Ultra-spinning black holes in higher dimensions
Ginebra, SWITZERLAND, 15/05/2001
Seminario de Theory Division, CERN (Ginebra)

Title: Por qué y cómo vivir en más de 3+1 dimensiones
Murcia, SPAIN, 28/09/2001
Seminario en Universidad de Murcia

Title: String balls at the LHC and beyond
Waterloo, CANADA, 07/11/2001
Seminario en Perimeter Institute for Theoretical Physics

Title: String balls at the LHC and beyond
Lausanne, SWITZERLAND, 03/12/2001
Seminario en Universidad de Lausanne

Title: The End of Black Hole Uniqueness
Santa Barbara, California, UNITED STATES, 12/02/2002
Seminario en Institute for Theoretical Physics

Title: The End of Black Hole Uniqueness
Stanford, California, UNITED STATES, 25/02/2002
Seminario en Institute for Theoretical Physics, Stanford University

Title: The End of Black Hole Uniqueness
Berkeley, California, UNITED STATES, 26/02/2002
Seminario en Universidad de California en Berkeley

Title: From p-branes to fluxbranes and back
Neuchatel, SWITZERLAND, 14/03/2002
Seminario en Universidad de Neuchatel

Title: Por qué y cómo vivir en más de 3+1 dimensiones
Murcia, SPAIN, 08/04/2002
Seminario en Universidad de Oviedo

Title: Black Holes at a TeV
Oviedo, SPAIN, 09/04/2002
Seminario en Universidad de Oviedo

Title: From p-branes to fluxbranes and back
Santiago de Compostela, SPAIN, 11/04/2002
Seminario en Universidad de Santiago de Compostela

Title: Por qué y cómo vivir en más de 3+1 dimensiones
Murcia, SPAIN, 12/04/2002

Seminario en Universidad de Santiago de Compostela

Title: Por qué y cómo vivir en más de 3+1 dimensiones
Murcia, SPAIN, 25/04/2002
Seminario en Universidad de Granada

Title: Quantum Black Holes as Holograms
Ginebra, SWITZERLAND, 24/07/2002
Theory Colloquium, CERN

Title: Quantum Black Holes as Holograms
Oporto, PORTUGAL, 18/09/2002
Seminario en Universidad de Oporto

Title: Quantum Black Holes as Holograms
Tokyo, JAPAN, 29/11/2002
Seminario en Tokyo Institute of Technology

Title: The End of Black Hole Uniqueness
Kyoto, JAPAN, 03/12/2002
Seminario en Yukawa Institute for Theoretical Physics

Title: Quantum Black Holes as Holograms
Barcelona, SPAIN, 09/12/2002
Seminario en Universidad de Barcelona

Title: Black Holes on the Brane: From Holography to Astrophysics
Valencia, SPAIN, 21/03/2003
Seminario en IFIC, Universidad de Valencia

Title: Black Holes on the Brane: From Holography to Astrophysics
Zaragoza, SPAIN, 30/05/2003
Seminario en Universidad de Zaragoza

Title: New Spins on Black Holes in Higher Dimensions
Waterloo, CANADA, 12/04/2004
Seminario en Perimeter Institute for Theoretical Physics

Title: New Spins on Black Holes in Higher Dimensions
Santa Barbara, California, UNITED STATES, 20/04/2004
Seminario en University of California, Santa Barbara

Title: New Spins on Black Holes in Higher Dimensions
Los Angeles, California, UNITED STATES, 21/04/2004
Seminario en University of Southern California, Los Angeles

Title: New Spins on Black Holes in Higher Dimensions
Davis, California, UNITED STATES, 23/04/2004
Seminario en University of California, Davis

Title: Black Rings
Barcelona, SPAIN, 25/10/2004

Title: Black Rings

Milan, ITALY, 11/11/2004

Seminario en Università di Milano

Title: Higher-dimensional black holes: phenomenological and formal aspects

Barcelona, SPAIN, 03/12/2004

Seminario en IFAE, Universitat Autònoma de Barcelona

Title: Black Rings

Copenhagen, DENMARK, 25/01/2005

Seminario en Niels Bohr Institute

Title: Black Rings

Utrecht, NETHERLANDS, 26/01/2005

Seminario en Spinoza Institute, Utrecht

Title: Black Rings

Durham, ENGLAND, 22/02/2005

Colloquium at Center for Particle Physics, University of Durham

Title: Black Rings

Ginebra, SWITZERLAND, 05/04/2005

Seminario en Theory Division, CERN

Title: Black Rings

Zaragoza, SPAIN, 17/06/2005

Seminario en Departamento de Física Teórica

Title: Einstein in Mordor: Black Rings in Higher-Dimensional Gravity

Santa Barbara, California, UNITED STATES, 31/01/2006

Physics Colloquium

Title: Black Hole Entropy as Entanglement Entropy: A Holographic Derivation

Amsterdam, NETHERLANDS, 12/04/2006

Seminario en Dept. Física Teórica, Universidad de Amsterdam

Title: Black holes in string theory: current status and open problems

Santiago de Compostela, SPAIN, 10/08/2006

Seminario en Dept. Física Teórica, Universidad de Santiago de Compostela

Title: Microstates of a neutral black hole

Paris, FRANCE, 09/11/2006

Seminario en Institut Henri Poincaré, invitado por Ecole Polytechnique, Paris

Title: Non-perturbative materialization of ghosts

Santiago de Compostela, SPAIN, 21/02/2006

Seminario en Dept. Física Teórica, Universidad de Santiago de Compostela

Title: Phases of higher-dimensional black holes

Leuven, BELGIUM, 30/05/2007

Title: Phases of higher-dimensional black holes
Durham, UNITED KINGDOM , 01/06/2007
Seminar at Center for Particle Theory

Title: Microstates of neutral and rotating black holes
Copenhagen, DENMARK , 10/10/2007
Seminar at Niels Bohr Institute

Title: Black Holes Galore in D>4
Amsterdam, NETHERLANDS , 15/01/2008
Seminar at Dept. Theoretical Physics, University of Amsterdam

Title: New Phases of Black Holes in Higher Dimensions
Neve Shalom, ISRAEL , 25/03/2008
Joint Israeli Theory Seminar

Title: Einstein in Mordor: Black Rings in Higher-Dimensional Gravity
Jerusalem, ISRAEL , 25/03/2008
Physics Colloquium

Title: Blackfolds
Kyoto, JAPAN , 25/11/2008
Seminar at Yukawa Institute for Theoretical Physics

Title: Blackfolds
Leuven, BELGIUM , 10/12/2008
Joint seminar at Institute for Theoretical Physics, K.U.Leuven + Universite Libre de Bruxelles

Title: New black holes in Higher Dimensions
Leuven, BELGIUM , 10/12/2008
Joint seminar at Institute for Theoretical Physics, K.U.Leuven + Universite Libre de Bruxelles

Title: Black holes in higher dimensions: An overview
Tsukuba, JAPAN , 26/01/2009
Seminar at KEK

Title: Blackfolds
Kashiwa - Tokyo, JAPAN , 04/02/2009
Seminar at Institute for the Physics and Mathematics of the Universe (IPMU) - The University of Tokyo

Title: Blackfolds: fluid dynamics for higher-dimensional black holes
Barcelona, SPAIN , 16/10/2009
Seminar at Universitat de Barcelona

Title: Effective worldvolume theory for black holes and branes
Seoul, REPUBLIC OF KOREA , 16/07/2010
Seminar at Korean Institute of Advanced Study

Title: Effective worldvolume theory for black branes
Paris, FRANCE , 13/01/2011

Title: Black holes, fluids, and their instabilities
Torino, ITALY, 03/05/2011
Seminar at Department of Theoretical Physics, Università degli Studi di Torino

Title: Viscous fluid, elastic solid: the effective dynamics of black branes
Trieste, ITALY, 11/04/2012
Joint SISSA/ICTP seminar

Title: Viscous fluid, elastic solid: the effective dynamics of black branes
Zaragoza, SPAIN, 22/06/2012
Seminar at Departamento de Física Teórica, Universidad de Zaragoza

Title: Viscous fluid, elastic solid: the effective dynamics of black branes
Orsay, FRANCE, 25/09/2012
Seminar at Laboratoire de Physique Théorique d'Orsay, Université Paris-Sud 11

Title: Viscous fluid, elastic solid: a general framework for the effective dynamics of black objects
Barcelona, SPAIN, 16/11/2012
Seminar at Facultat de Física, Universitat de Barcelona

Title: The Large D limit of General Relativity
Nottingham, ENGLAND, 26/04/2013
Seminar at Centre for Astronomy and Particle Theory, University of Nottingham

Title: The Large D limit of General Relativity
London, ENGLAND, 19/06/2013
Seminar at Imperial College London

Title: The Large D limit of General Relativity
Zaragoza, SPAIN, 21/06/2013
Seminar at Departamento de Física Teórica, Universidad de Zaragoza

Title: Universal features of black holes in the large D limit
Amsterdam, NETHERLANDS, 04/02/2014
Seminar at Institute of Physics, University of Amsterdam

Title: Black hole dynamics at large D
Kobe, JAPAN, 06/06/2014
Seminar at Department of Physics, Kobe University

Title: The large D limit of General Relativity
Kyoto, JAPAN, 12/06/2014
Colloquium at Yukawa Institute for Theoretical Physics, Kyoto University

Title: Black hole dynamics at large D
Beijing, CHINA, 17/06/2014
Online seminar at Kavli Institute for Theoretical Physics China

Title: The large D limit of General Relativity
Osaka, JAPAN, 04/07/2014

Title: Black hole dynamics at large D

Kashiwa, JAPAN, 09/07/2014

Seminar at Kavli Institute for the Physics and Mathematics of the Universe, The University of Tokyo

Title: The large D limit of General Relativity

Tsukuba, JAPAN, 10/07/2014

Seminar at KEK

Title: The large D limit of General Relativity

Nagoya, JAPAN, 11/07/2014

Seminar at Department of Mathematics, Nagoya University

Title: The large D limit of General Relativity

Valencia, SPAIN, 29/10/2014

Seminar at IFIC, Universitat de Valencia

Title: Black holes in the 1/D expansion

Brighton, UNITED KINGDOM, 10/11/2014

Seminar at Department of Theoretical Physics, University of Sussex

Title: Black holes in the 1/D expansion

Oxford, UNITED KINGDOM, 11/11/2014

Seminar at Rudolf Peierls Centre for Theoretical Physics, Oxford University

Title: Black holes in the 1/D expansion

Southampton UNITED KINGDOM, 13/11/2014

Seminar at Southampton Theory Astrophysics and Gravity (STAG) Research Centre, University of Southampton

Title: Black holes in the limit of very many dimensions

Lisboa PORTUGAL, 03/12/2014

Colloquium at Instituto Superior Técnico, Lisboa

Title: The large D limit of General Relativity

Potsdam GERMANY, 18/12/2014

Colloquium at Max Planck Institute for Gravitational Physics (Albert Einstein Institute)

Title: Black holes in the 1/D expansion

Geneva SWITZERLAND, 13/01/2015

String Theory Seminar, CERN Theoretical Physics Group

Title: Black holes in the limit of very many dimensions

Leipzig GERMANY, 27/01/2015

Colloquium at Institut für Theoretische Physik, Universität Leipzig

Title: Cien años de gravedad / One Hundred Years of Nigritude

Barcelona SPAIN, 02/02/2015

Colloquium at Institut de Física d'Altes Energies (IFAE)

Title: Heart of Darkness: General Relativity @ 100 (ICCUB Colloquium)

Barcelona SPAIN, 07/05/2015

Title: Black holes in the limit of very many dimensions
Durham, UK UNITED KINGDOM , 12/05/2015
Colloquium at Centre for Particle Theory, Durham University

Title: Effective theory of black holes at large D
Vienna, Austria AUSTRIA , 08/10/2015
Seminar at Institute for Theoretical Physics, TU Wien

Title: General Relativity in the limit of very many dimensions
Dublin, Ireland IRELAND , 06/11/2015
Seminar at Mathematical Physics Department, National University of Ireland Maynooth

Title: General Relativity in the limit of very many dimensions
Edinburgh, Scotland SCOTLAND , 05/02/2016
Higgs Centre Colloquium. Higgs Centre for Theoretical Physics, University of Edinburgh

Title: General Relativity in the limit of very many dimensions
Bilbao SPAIN 04/03/2016
Departamento de Física Teórica, Universidad del País Vasco

Title: Black holes in the 1/D expansion: Hydro-elastic complementarity
Paris FRANCE 31/03/2016
Rencontres Théoriciennes, Institut Henri Poincaré, Université Paris 6

Title: Black hole fusion made easy
Granada SPAIN 21/04/2016
Seminar at Dpto Física Teórica y del Cosmos, Universidad de Granada

Title: Black holes at large D: Things we've learned so far
Kyoto JAPAN 03/06/2016
Seminar at Yukawa Institute for Theoretical Physics, Kyoto

Title: Heart of darkness: General Relativity and Black Holes @ 101
Santiago de Compostela SPAIN 29/09/2016
Colloquium- Faculty of Physics, Universidade de Santiago de Compostela

Title: Black holes at large D: Things we've learned so far
Leuven BELGIUM 19/10/2016
KU Leuven - Joint seminar of ULB, VUB, KUL, UMONS and the International Solvay Institutes

Title: Black holes at large D: Things we've learned so far
Leiden NETHERLANDS 03/11/2016
String seminar- Lorentz Institute, University of Leiden

Title: Black hole fusion made easy
Madrid SPAIN 14/11/2016

Title: Black hole fusion made easy
Nagoya JAPAN 25/11/2016
String/GR group seminar in Mathematics Department, Nagoya University

Title: Black holes @ 100
Nagoya JAPAN 30/11/2016
Colloquium at Kobayashi-Maskawa Institute, Nagoya University

Title: Black hole fusion made easy
Potsdam GERMANY 08/02/2017
Max Planck Institute for Gravitational Physics (Albert Einstein Institute), Potsdam

Title: 'Black hole fusion made easy' - QMAP Colloquium
Davis, California UNITED STATES 11/04/2018
Name of the event: Center for Quantum Mathematics and Physics (QMAP) - UC Davis

Title: 'Black hole dynamics in the 1/D expansion' - Fields, Strings, and Gravity seminar
Davis, California UNITED STATES 12/04/2018
Physics Department, UC Davis

Title: Theory Colloquium 'Can we learn any particle physics and quantum gravity from LIGO et al?'
Padova ITALY 18/04/2018
Dipartimento di Fisica e Astronomia, Universita de Padova

Title: Softly colliding black holes
Amsterdam NETHERLANDS 15/05/2018
Seminar at ITFA - University of Amsterdam

Title: Black hole fusion made easy
Santiago de Chile CHILE 08/11/2018
Seminar at Facultad de Física, Pontificia Universidad Católica de Chile

Title: Cosmic censorship violation and black hole collisions in higher dimensions
London UNITED KINGDOM 30/01/2019
Seminar at King's College London

Title: Cosmic censorship violation and black hole collisions in higher dimensions
Ann Arbor, Michigan UNITED STATES 05/04/2019
Seminar at Physics Department, University of Michigan

Title: BHI Colloquium: Cosmic censorship violations: mostly harmless
Boston UNITED STATES 09/04/2019
Colloquium at Black Hole Initiative, Harvard University

Title: Cosmic Censorship and Black Hole collisions in Hi D
Boston UNITED STATES 10/04/2019
Seminar at Center for Theoretical Physics, MIT

Title: Cosmic censorship violation and black hole collisions in higher dimensions
London UNITED KINGDOM 07/05/2019
Seminar at Imperial College, London

Title: How the 1/D expansion simplifies black hole physics
London UNITED KINGDOM 08/05/2019
Seminar at London Gravity Seminar

Title: Quantum BTZ black hole
Potsdam GERMANY 30/09/2020
Online Seminar at Albert Einstein Institute, Potsdam

Title: Quantum BTZ black hole
Paris FRANCE 30/09/2020
Online Seminar at "Rencontres Théoriciennes" all-Paris seminar

Title: Quantum BTZ black hole
Los Angeles USA 06/11/2020
Online Seminar at Caltech String Theory Seminar

Title: All Things EFT: Effective Theories of Classical Black Hole & Black Brane Dynamics
Copenhagen DENMARK 09/12/2020
Seminar at Niels Bohr Institute for the *All Things EFT international online lecture series*

Research Grants

As Principal Investigator

Title: Gravitació

Program: Projectes de recerca per potenciar els grups de recerca consolidats

Financing administration: Departament d'Universitats, Recerca i Societat de la Informació (Generalitat de Catalunya) DURSI

Reference: 2005SGR00082 **Amount:** 41.200,00 **Duration, since:** 2005 **Until:** 2009

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar

Title: Black holes in higher dimensional gravity theories

Program: HRM. VIè Programa Marc. Human resources and mobility

Financing administration: Unió Europea

Reference: MEIF-CT-2006-038924 **Amount:** 133.046,00 **Duration, since:** 2006 **Until:** 2008

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar; Óscar J. C. Dias

Title: Contractació d'un tècnic de suport a la recerca de la UB del Grup 3. Referència dels grups de recerca consolidats :

2005SGR00082, 2005SGR00236, 2005SGR00688, 2005SGR00889 i 2005SGR00515

Program: Sense especificar

Financing administration: Universitat de Barcelona

Reference: --- **Amount:** 94.930,80 **Duration, since:** 2007 **Until:** 2010

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar

Title: Teoría y fenomenología de las interacciones fundamentales: Gravitación y cosmología.

Program: Física de Partículas (FPA)

Financing administration: Ministerio de Ciencia e Innovación

Reference: FPA2010-20807-C02-02 **Amount:** 212.900,00 **Duration, since:** 2011 **Until:** 2013

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar

Title: Contractació d'un tècnic de suport a la recerca de la UB del Grup 3. Referència dels grups de recerca consolidats :

2009SGR168, 2009SGR876, 2009SGR634, 2009SGR1249

Financing administration: Universitat de Barcelona

Reference: --- **Amount:** 75.036,87 **Duration, since:** 2010 **Until:** 2013

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar

Title: Teoria y fenomenología de las interacciones fundamentales: gravitación y cosmología

Program: Física de Partículas (FPA)

Financing administration: Ministerio de Economía y Competitividad

Reference: FPA2013-46570-C2-2-P **Amount:** 175.000,00 **Duration, since:** 2014 **Until:** 2016

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar; Bartolome S. Fiol Nuñez

Title: Rotational effects on strongly gravitating systems with matter

Program: H2020-MSCA

Financing administration: Unió Europea

Reference: H2020-MSCA-IF-2014 **Amount:** 170,121.60 **Duration, since:** 2015 **Until:** 2017

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar

Title: The fate of black holes in high-energy physics -- exploring their dynamical instabilities

Program: H2020-MSCA

Financing administration: Unió Europea

Reference: MSCA-IF-2014-EF **Amount:** 158,121.60 **Duration, since:** 2016 **Until:** 2018

Principal Investigator: Roberto Alejand Emparan Garcia de Salazar; Jorge Rocha

Title: The fate of black holes in high-energy physics -- exploring their dynamical instabilities (BHstabNL)

Program: HORIZON 2020 - MSCA.
Financing administration: Unió Europea
--- Número de proyecto/contrato: 655360 Importe (costes indirectos incluídos): 158.121,60 **Duration, since:** 2016 **Until:** 2018
Principal Investigator: Roberto Alejand Emparan García de Salazar; Helvi Witek

Title: A New Strategy for Gravity and Black Holes (GravBHs)
Program: ERC Advanced Grants - HORIZON 2020. European Research Council.
Financing administration: Unió Europea
Reference: GravBHs 692951 **Amount:** 2,138,825.00 **Duration, since:** 2016 **Until:** 2021
Principal Investigator: Roberto Alejand Emparan García de Salazar

As Participant/Research team member

Title: Investigaciones en teoría cuántica de campos y supercuerdas
Program: Programa Nacional de Física de Altas Energías
Financing administration: Comisión Interministerial de Ciencia y Tecnología (CICYT)
Reference: AEN-90-0330 **Amount:** --- **Duration, since:** 1990 **Until:** 1993
Principal Investigator: Miguel Ángel Goñi de Miguel

Title: Investigación en teoría cuántica de campos
Program: Programa Nacional de Física de Altas Energías
Financing administration: Comisión Interministerial de Ciencia y Tecnología (CICYT)
Reference: AEN-90-0435 **Amount:** --- **Duration, since:** 1993 **Until:** 1996
Principal Investigator: Miguel Ángel Goñi de Miguel

Title: Teorías cuánticas de gravedad y supergravedad
Program: Ajuts a la Recerca
Financing administration: Universidad del País Vasco
Reference: UPV 063.310-EB119/92 **Amount:** --- **Duration, since:** 1993 **Until:** 1996
Principal Investigator: Juan Luis Mañes Palacios

Title: Gravedad cuántica, cuerdas y horizontes
Program: Ajuts a la Recerca
Financing administration: Universidad del País Vasco
Reference: UPV 063.310-EB225/95 **Amount:** --- **Duration, since:** 1995 **Until:** 1998
Principal Investigator: Juan Luis Mañes Palacios

Title: An investigation of the instabilities of extended objects in higher-dimensional spacetimes
Program: Ajuts a la Recerca
Financing administration: Engineering and Physical Sciences Research Council
Reference: EPSRC GR/L38158 **Amount:** --- **Duration, since:** 1997 **Until:** 1999
Principal Investigator: Ruth A.W. Gregory

Title: Efectos térmicos en teoría cuántica de campos y supercuerdas
Program: Ajuts a la Recerca
Financing administration: Universidad del País Vasco
Reference: UPV 063.310-EB187/98 **Amount:** --- **Duration, since:** 1998 **Until:** 2001
Principal Investigator: Juan Luis Mañes Palacios

Title: Efectos térmicos, estados no-perturbativos, y fenómenos fuera del equilibrio en teoría de campos y cuerdas
Program: Programa Nacional de Física de Altas Energías
Financing administration: Comisión Interministerial de Ciencia y Tecnología (CICYT)
Reference: AEN-99-0315 **Amount:** --- **Duration, since:** 2000 **Until:** 2002
Principal Investigator: Juan Luis Mañes Palacios

Title: Black holes and vortices in the early Universe
Program: Ajuts a la Recerca
Financing administration: Royal Society of Great Britain
Reference: --- **Amount:** --- **Duration, since:** 2000 **Until:** 2001
Principal Investigator: Ruth A.W. Gregory

Title: The quantum structure of spacetime and the geometric nature of fundamental interactions
Program: Sense especificar
Financing administration: Unió Europea
Reference: HPRN-CT-2001-00131 **Amount:** --- **Duration, since:** 2000 **Until:** 2004
Principal Investigator: Antoine Van Proeyen

Title: Teorías cuánticas efectivas y fundamentales
Program: Programa Nacional de Física de Partículas y Grandes Aceleradores
Financing administration: Comisión Interministerial de Ciencia y Tecnología (CICYT)
Reference: FPA2001-3598 **Amount:** 312.333,99 **Duration, since:** 2001 **Until:** 2004
Principal Investigator: Joaquín Gomis Torne

Title: Gravedad cuantica, geometria no conmutativa y efectos termicos en teorias de campos y cuerdas
Program: Sense especificar
Financing administration: Ministerio de Ciencia y Tecnología
Reference: FPA 2002-02037 **Amount:** --- **Duration, since:** 2002 **Until:** 2005
Principal Investigator: Juan Luis Mañes Palacios

Title: Teoria Cuantica de Campos
Program: Ajuts a la Recerca
Financing administration: Universidad del País Vasco
Reference: UPV 00172.310-14497/2002 **Amount:** 18.000,00 **Duration, since:** 2002 **Until:** 2005
Principal Investigator: Manuel A. Valle-Basagoiti

Title: Gravitació i Cosmologia Relativistes i Sistemes Estocàstics
Program: Sense especificar
Financing administration: Departament d'Universitats, Recerca i Societat de la Informació (Generalitat de Catalunya) DURSI
Reference: 2001 SGR00061 **Amount:** 24.040,48 **Duration, since:** 2002 **Until:** 2004
Principal Investigator: José Alberto Lobo Gutiérrez

Title: Constituents, fundamental forces and symmetries of the universe
Program: Ajuts a la Recerca
Financing administration: Comisión Europea
Reference: MRTN-CT-2004-005104 **Amount:** 86.177,62 **Duration, since:** 2004 **Until:** 2008
Principal Investigator: Joaquín Gomis Torne

Title: Gravitación y cosmología en teorías cuánticas efectivas y fundamentales
Program: Programa Nacional de Física de partículas
Financing administration: Ministerio de Ciencia y Tecnología
Reference: FPA2004-04582-C02-02 **Amount:** 170.140,00 **Duration, since:** 2004 **Until:** 2007
Principal Investigator: Enric Verdaguer Oms

Title: RTN Winter School on Strings, Supergravity and gauge theory
Program: Programa Nacional de Física de Partículas y Grandes Aceleradores
Financing administration: Ministerio de Educación y Ciencia
Reference: FPA2002-12286-E **Amount:** 9.000,00 **Duration, since:** 2004 **Until:** 2004
Principal Investigator: Joaquín Gomis Torne

Title: Teoría y fenomenología de las interacciones fundamentales: Gravitación y cosmología.

Program: Programa Nacional de Física de partículas

Financing administration: Ministerio de Educación y Ciencia

Reference: FPA2007-66665-C02-02 **Amount:** 199.500,00 **Duration, since:** 2007 **Until:** 2010

Principal Investigator: Jaime Garriga Torres

Title: Centro nacional de física de partículas, astropartículas y nuclear

Program: Sense especificar

Financing administration: Ministerio de Educación y Ciencia

Reference: CSD2007-00042 **Amount:** 479.200,00 **Duration, since:** 2007 **Until:** 2012

Principal Investigator: Lluis Garrido Beltran

Title: Gravitación, partículas y cuerdas

Program: Projectes de recerca per potenciar els grups de recerca consolidats

Financing administration: Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR)

Reference: 2009SGR168 **Amount:** 44.720,00 **Duration, since:** 2009 **Until:** 2013

Principal Investigator: David Julian Mateos Sole

Title: The String Theory Universe

Program: Acciones COST

Financing administration: European Union - COST (European CO-operation in the field of Scientific and Technical Research)

Reference: MP1210 **Amount:** 400.000,00 **Duration, since:** 2013 **Until:** 2017

Principal Investigator: Silvia Penati

Title: Gravitation, Strings, and Cosmology

Financing administration: Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR)

Reference: 2014SGR1474 **Amount:** 43.000,00 **Duration, since:** 2014 **Until:** 2016

Principal Investigator: Jaime Garriga Torres

Title: Institut de Ciències del Cosmos (ICC)

Program: Programa Nacional de Astronomía y Astrofísica

Financing administration: Ministerio de Economía y Competitividad

Reference: MDM-2014-0369 **Amount:** 2.000.000,00 **Duration, since:** 2015 **Until:** 2019

Principal Investigators: Josep Maria Paredes Poy; David Julian Mateos Sole; Assumpta Parreño Garcia; Jordi Miralda Escude; Roberto Alejand Emparan Garcia de Salazar; Ricardo Graciani Diaz; Licia Verde

Title: Teoría y fenomenología de las interacciones fundamentales: Gravitación y Cosmología

Program: Programa Nacional de Física de Partículas y Grandes Aceleradores

Financing administration: Ministerio de Economía y Competitividad

Reference: FPA2016-76005-C2-2-P **Amount:** 211.750,00 **Duration, since:** 2016 **Until:** 2019

Principal Investigators: Jaime Garriga Torres; Bartolome S. Fiol Nuñez

Title: Teoría y fenomenología de las interacciones fundamentales: Gravitación y Cosmología

Program: Programa Nacional de Física de Partículas y Grandes Aceleradores

Financing administration: Ministerio de Universidades

Reference: Amount: 204.000,00 **Duration, since:** 2020 **Until:** 2022

Principal Investigators: David Mateos; Bartolome S. Fiol Nuñez

Title: Gravitation, Strings, and Cosmology

Financing administration: Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR)

Reference: 2017SGR754 **Amount:** 65.896,00 **Duration, since:** 2017 **Until:** 2021

Principal Investigator: Bartolome S. Fiol Nuñez

Research stays abroad

Center: CERN, Theory Division
Ginebra **Country:** SWITZERLAND **Year:** 1992 **Duration:** 14 Days
Subject: Supermatrix models
Unpaid associate

Center: CERN, Theory Division
Ginebra **Country:** SWITZERLAND **Year:** 1993 **Duration:** 2 Months
Subject: Black holes in string theory
Unpaid associate

Center: Princeton University
Princeton **Country:** UNITED STATES **Year:** 1995 **Duration:** 1 Months 18 Days
Subject: Quantum aspects and entropy of Black holes
Invited researcher

Center: University of California, Santa Barbara
Santa Barbara, California **Country:** UNITED STATES **Year:** 1996 **Duration:** 2 Years
Subject: Black holes in string theory
Postdoctoral researcher

Center: University of Durham
Durham **Country:** UNITED KINGDOM **Year:** 1998 **Duration:** 1 Years 9 Months
Subject: Gravity and Black holes
Postdoctoral researcher

Center: Department of Physics and Astronomy, University of Kentucky
Lexington, Kentucky **Country:** UNITED STATES **Year:** 1999 **Duration:** 16 Days
Subject: AdS/CFT
Invited researcher

Center: Department of Mathematics/Center for Particle Theory, University of Durham
Durham **Country:** UNITED KINGDOM **Year:** 2000 **Duration:** 13 Days
Subject: Brane-worlds
Invited researcher

Center: Perimeter Institute for Theoretical Physics
Waterloo **Country:** CANADA **Year:** 2001 **Duration:** 18 Days
Subject: Black holes
Invited researcher

Center: Institute for Theoretical Physics, Stanford University
Stanford **Country:** UNITED STATES **Year:** 2001 **Duration:** 12 Days
Subject: Black Holes
Invited researcher

Center: CERN, Theory Division
Ginebra **Country:** SWITZERLAND **Year:** 2001 **Duration:** 2 Years
Subject: Strings and Black Holes
Postdoctoral researcher (Fellow)

Center: Institute for Theoretical Physics, Stanford University
Stanford **Country:** UNITED STATES **Year:** 2002 **Duration:** 1 Months 2 Days

Subject: Black holes
Invited researcher

Center: Feza Gürsey Institute
Estambul **Country:** TURKEY **Year:** 2003 **Duration:** 7 Days
Subject: Black holes in Brane-worlds
Invited researcher

Center: Perimeter Institute
Waterloo **Country:** CANADA **Year:** 2004 **Duration:** 7 Days
Subject: Gravity in Higher Dimensions
Invited researcher

Center: Department of Physics, University of California, Davis
Davis, California **Country:** UNITED STATES **Year:** 2004 **Duration:** 6 Days
Subject: Gravity and Cosmology
Invited researcher

Center: Department of Physics, University of California, Santa Barbara
Santa Barbara, California **Country:** UNITED STATES **Year:** 2004 **Duration:** 3 Days
Subject: Gravity in Higher Dimensions
Invited researcher

Center: Fields Institute
Toronto **Country:** CANADA **Year:** 2005 **Duration:** 7 Days
Subject: Gravitational Aspects of String Theory
Invited researcher

Center: Perimeter Institute
Waterloo **Country:** CANADA **Year:** 2005 **Duration:** 7 Days
Subject: Gravitational Aspects of String Theory
Invited researcher

Center: Kavli Institute for Theoretical Physics
Santa Barbara **Country:** UNITED STATES **Year:** 2006 **Duration:** 1 Months 7 Days
Subject: Scanning New Horizons: General Relativity Beyond 4 Dimensions
Invited researcher

Center: Aspen Center for Physics
Aspen **Country:** UNITED STATES **Year:** 2006 **Duration:** 14 Days
Subject: Recent Advances in Black Hole Physics in String Theory
Invited researcher

Center: The Hebrew University of Jerusalem
Jerusalem **Country:** ISRAEL **Year:** 2007 **Duration:** 7 Days
Subject: Einstein's Gravity in Higher Dimensions
Invited researcher

Center: Galileo Galilei Institute
Firenze **Country:** ITALY **Year:** 2007 **Duration:** 1 Months
Subject: M-theory approaches to particle physics and cosmology
Invited researcher

Center: Ecole Normale Supérieure

Paris **Country:** FRANCE **Year:** 2007 **Duration:** 6 Days

Subject: Black Holes, Black Rings, and Modular Forms

Invited researcher

Center: Racah Institute of Physics, Hebrew University of Jerusalem

Jerusalem **Country:** ISRAEL **Year:** 2008 **Duration:** 9 Days

Subject: Black Holes

Invited researcher

Center: Niels Bohr International Academy, Niels Bohr Institute

Copenhagen **Country:** DENMARK **Year:** 2008 **Duration:** 7 Days

Subject: Black Holes

Invited researcher

Center: Tata Institute of Fundamental Research

Mumbai **Country:** INDIA **Year:** 2008 **Duration:** 22 Days

Subject: String Theory

Invited researcher

Center: CERN - Theoretical Physics Division

Geneva **Country:** SWITZERLAND **Year:** 2008 **Duration:** 12 Days

Subject: Black Holes: A Landscape of Theoretical Physics Problems

Invited researcher

Center: KEK - High Energy Accelerator Research Organization

Tsukuba **Country:** JAPAN **Year:** 2009 **Duration:** 20 Days

Subject: Higher-dimensional black holes

Invited researcher

Center: Korean Institute for Advanced Study

Seoul **Country:** REPUBLIC OF KOREA **Year:** 2010 **Duration:** 8 Days

Subject: Higher-dimensional black holes

Invited researcher

Center: Laboratoire d'AstroParticule et Cosmologie (APC)

Paris **Country:** FRANCE **Year:** 2011 **Duration:** 3 Days

Subject: Black holes

Invited researcher

Center: Laboratoire de Physique Theorique d'Orsay

Orsay **Country:** FRANCE **Year:** 2011 **Duration:** 3 Days

Subject: Black Holes and their Stability

Invited researcher

Center: Isaac Newton Institute for Mathematical Sciences,

Cambridge **Country:** ENGLAND **Year:** 2013 **Duration:** 7 Days

Subject: Mathematics and Physics of the Holographic Principle

Invited researcher

Center: Yukawa Institute for Theoretical Physics

Kyoto **Country:** JAPAN **Year:** 2014 **Duration:** 3 Months

Subject: Black holes in higher dimensions

Invited Professor (with contract)

Center: The Galileo Galilei Institute for Theoretical Physics
Place: Florence **Country:** ITALY **Year:** 2014 **Duration:** 5 Days
Subject:Holographic Methods for Strongly Coupled Systems
Invited researcher

Center: Fields Institute
Place: Toronto **Country:** CANADA **Year:** 2015 **Duration:** 4 Days
Subject:Focus Program on 100 Years of General Relativity
Invited researcher

Center: Yukawa Institute for Theoretical Physics, Kyoto University
Place: Kyoto **Country:** JAPAN **Year:** 2016 **Duration:** 16 Days
Subject:Quantum Information in String Theory and Many-body Systems
Invited researcher

Center: Kobayashi-Maskawa Institute for the Origin of Particles and the Universe
Place: Nagoya **Country:** JAPAN **Year:** 2016 **Duration:** 17 Days
Subject:Black holes in higher dimensions
Invited Professor

Center: Erwin Schrödinger International Institute for Mathematics and Physics
Place: Vienna **Country:** AUSTRIA **Year:** 2017 **Duration:** 5 Days
Subject:Invited participant at ESI Programme and Workshop 'Quantum Physics and Gravity'
Invited researcher

Center: Centro de Ciencias de Benasque Pedro Pascual
Place: Benasque **Country:** SPAIN **Year:** 2017 **Duration:** 12 Days
Subject:Organizer and participant in research workshop 'Gravity - New perspectives from strings and higher dimensions'
Invited researcher

Center: Yukawa Institute for Theoretical Physics (YITP)
Place: Kyoto **Country:** JAPAN **Year:** 2018 **Duration:** 8 Days
Subject: Invited participant at long-term workshop "Gravity and Cosmology 2018"
Invited researcher

Center: Center for Quantum Mathematics and Physics (QMAP) - UC Davis
Place: Davis **Country:** USA **Year:** 2018 **Duration:** 6 Days
Subject: Invited visitor at Center for Quantum Mathematics and Physics (QMAP) - UC Davis
Invited researcher

Center: CERN
Place: Geneva **Country:** SWITZERLAND **Year:** 2018 **Duration:** 6 Days
Subject: Invited participant at CERN workshop "Black holes, quantum information, and space-time reconstruction"
Invited researcher

Center: Centro de Ciencias de Benasque Pedro Pascual

Place: Benasque **Country:** SPAIN **Year:** 2019 **Duration:** 12 Days

Subject: Organizer and participant in research workshop 'Gravity - New perspectives from strings and higher dimensions'

Invited researcher

Center: Kavli Institute for Theoretical Physics

Place: Santa Barbara **Country:** USA **Year:** 2020 **Duration:** 28 Days

Subject: Invited participant in research program "Gravitational Holography"

Invited researcher

Participation in Committees and International Delegations

ERC Starting Grants 'Fundamental Constituents of Matter'
Panel Member in the ERC-2013-StG Call for Proposals
Start date: 15/01/2013
End date: 19/04/2013

ERC Starting Grants 'Fundamental Constituents of Matter'
Panel Member in the ERC-2015-StG Call for Proposals
Start date: 27/04/2015
End date: 11/09/2015

ERC Starting Grants 'Fundamental Constituents of Matter'
Panel Member in the ERC-2017-StG Call for Proposals
Start date: 21/02/2017
End date: 23/06/2017

ERC Starting Grants 'Fundamental Constituents of Matter'
Panel Member in the ERC-2019-StG Call for Proposals
Start date: 05/03/2019
End date: 06/06/2019

International Society on General Relativity and Gravitation
Member of the Committee (for Spain)
Start date: 01/07/2010
End date: 01/07/2019

Editorial Board of Journal of High Energy Physics
Journal of High Energy Physics
Member of editorial board
Start date: 06/05/2009
End date:

Spanish Society of Gravitation and Relativity (SEGRE)
Vicepresident
Start date: 07/09/2009
End date: 12/09/2013

Editorial Board of International Journal of Modern Physics D
Member of editorial board
Start date: 13/05/2016
End date:

Board member of research evaluation panel of Physics at Amsterdam Universities
Member of Evaluation Panel
Start date: 10/12/2017
End date: 13/12/2017

Organization of R+D activities

EU-RTN Winter School on Strings, Supergravity and Gauge Theory, Barcelona 12--16 Enero 2004
Miembro del Comité Organizer
Research and Training Networks, European Comission
2004

Workshop on Einstein's Gravity in Higher Dimensions, Jerusalem, 17-23 Feb 2007
Miembro del Comité Organizer
Workshop at The Hebrew University Institute for Advanced Studies, Jerusalem
2007

Network School on Random Matrices and Random Geometry, Barcelona, 16-20 April 2007
Miembro del Comité Científico
ENRAGE: European Network on Random Geometry and Random Matrices
2007

Pre-strings 2007, Workshop on Gravitational Aspects of Strings and Branes, Granada, 18-22 June 2007
Miembro del Comité Científico
Red Temática de Relatividad y Gravitación
2007

3rd RTN Network Conference 'Constituents, Fundamental Forces and Symmetries of the Universe'
Miembro del Comité Científico
Research and Training Networks, European Comission
2007

Workshop on Gravitational Aspects of Strings and Branes 'Gravity, Strings and Gauge Theories', Sitges, 7-9 February 2008
Miembro del Comité Científico
Red Temática de Relatividad y Gravitación
2008

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 13-24 July 2009
Organizer
2009

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 17-29 July 2011
Organizer
2011

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 14-26 July 2013
Organizer
2013

Encuentros Relativistas Españoles 2013, Centro de Ciencias de Benasque, 8-13 Sep 2013
Organizer
2013

GR21
Member of Scientific Committee
International Society of General Relativity and Gravitation
2016

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 12-24 July 2015
Organizer
2015

2nd Mediterranean Conference on Classical and Quantum Gravity
Member of International Advisory Board
2015

Long Term Workshop on 'Holographic vistas on Gravity and Strings', Yukawa Institute for Theoretical Physics
Co-Organizer
2014

2nd COST MP1210 Meeting and 20th European Workshop on String Theory
Member of International Advisory Committee
2014

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 14-26 July 2017
Organizer
2017

Iberian Strings 2017
Member of Scientific Committee
2017

Iberian Strings 2018
Member of Scientific Committee
2018

Encuentros Relativistas Españoles-Portugueses EREP 2018
Member of Scientific Committee
2018

Iberian Strings 2019
Organizer
2019

The vacuum of the Universe IV
Organizer
2019

Workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque, 14-26 July 2019
Organizer
2019

"Gravitational Wave Probes of Fundamental Physics" for JENAS 2019 (APPEC, ECFA and NuPECC)
Managing team member
2020

Management of R+D activities

Research projects of Stichting voor Fundamenteel Onderzoek der Materie (FOM), Holanda
Evaluador
2001

Research projects of Stichting voor Fundamenteel Onderzoek der Materie (FOM), Holanda
Evaluador
2002

Research projects of Israel Science Foundation (ISF)
Evaluador
2002

Academic promotion at National University of Singapore
Evaluador
2003

ANEP (Agencia Nacional de Evaluación y Prospectiva), Ministerio de Ciencia y Tecnología
Evaluador de proyectos de investigación
2004

Research projects of Stichting voor Fundamenteel Onderzoek der Materie (FOM), Holanda
Evaluador
2004

Research projects of Israel Science Foundation (ISF)
Evaluador
2005

ANEP (Agencia Nacional de Evaluación y Prospectiva), Ministerio de Ciencia y Tecnología
Evaluador de proyectos de investigación
2005

ANEP (Agencia Nacional de Evaluación y Prospectiva), Ministerio de Ciencia y Tecnología
Evaluador de proyectos de investigación de la Comunidad de Madrid
2005

Comisión del Plan Nacional de Física 2006, Ministerio de Educación y Ciencia
Evaluador de proyectos de investigación
2006

The Hebrew University of Jerusalem
Evaluador para promoción académica
2006

Grant Agency, Academy of Sciences of the Czech Republic
Evaluador de proyectos de investigación
2006

Proyectos de Investigación del Engineering and Physical Sciences Research Council (EPSRC), UK
Evaluador
2006

ANEP (Agencia Nacional de Evaluación y Prospectiva), Ministerio de Educación y Ciencia
Evaluador de proyectos de investigación
2007

Research projects of Israel Science Foundation (ISF)
Evaluador
2007

AGAUR (Agència de Gestió d'Ajuts Universitaris i de Recerca), Generalitat de Catalunya
Evaluador de proyectos de investigación
2007

ANEP (Agencia Nacional de Evaluación y Prospectiva), Ministerio de Educación y Ciencia
Evaluador de proyectos de investigación
2008

Research projects of Grant Agency, Academy of Sciences of the Czech Republic
Evaluador de proyectos de investigación
2008

Comisión del Plan Nacional de Física 2008, Ministerio de Educación y Ciencia
Evaluador de proyectos de investigación
2008

Habilitation a Diriger des Recherches, Universite de Paris Sud XI
Examinador
2008

Sociedad Española de Gravitación y Relatividad (SEGRE)
Vocal de la Junta Directiva
2008

Research projects of United States - Israel Binational Science Foundation
Evaluador de proyectos de investigación
2009

Sociedad Española de Gravitación y Relatividad (SEGRE)
Vicepresidente
2009

Habilitation a Diriger des Recherches, Ecole Polytechnique, Paris
Examinador
2009

Academic promotion at University of Cambridge
Evaluador
2009

Journal of High Energy Physics
Editor
2009-

Institute of Cosmos Sciences
Secretary
2010-2013

International Society on General Relativity and Gravitation
Member of the Committee (for Spain)
2010-2019

Academic promotion at University of Durham
Evaluador
2011

Comisión del Plan Nacional de Física 2011, Ministerio de Ciencia e Innovación
Evaluador de proyectos de investigación
2011

Academic promotion at University of Leuven
Evaluador
2010

Research projects of South Africa's National Research Foundation
Evaluador de proyectos de investigación
2010

Research projects of Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT), Chile
Evaluador de proyectos de investigación
2010

Research projects of German Research Foundation
Evaluador de proyectos de investigación
2010

German Research Foundation
Evaluador de proyectos de investigación
2011

Academic promotion at University of Durham
Evaluador
2011

Comisión del Plan Nacional de Física 2008, Ministerio de Educación y Ciencia
Evaluador de proyectos de investigación
2011

Research projects of Grant Agency, Academy of Sciences of the Czech Republic
Evaluador de proyectos de investigación
2011

Referee for promotion at Perimeter Institute for Theoretical Physics
Consultant
2012

Research projects of Swiss National Science Foundation
Referee
2012

Panel Member in the ERC-2013-StG Call for Proposals
Member of Evaluation Panel
2013

Research projects of NWO 'Vidi' program
Referee
2013

Research projects of FWO postdoctoral fellowships (Belgium)
Referee
2015

Panel Member in the ERC-2015-StG Call for Proposals
Member of Evaluation Panel
2015

TUBITAK Science awards (Turkey)
Referee
2015

Panel Member in the ERC-2017-StG Call for Proposals
Member of Evaluation Panel
2017

Panel Member in the ERC-2019-StG Call for Proposals
Member of Evaluation Panel
2019

Dissemination and Outreach

Forats Negres: Ficció, Especulació, Realitat
Conferència a la Fundació d'Estudis Superiors d'Olot "Els Grans Interrogants de la Ciéncia"
5 Jun, 2009

Introducció a la Física Teòrica: Quarks, Forats Negres, Cosmologia i Cordes
Co-coordinator of Summer project for High School Students of the Excellence Program CiMs - Cellex.
10 Jul, 2013

El Universo
18a Setmana de la Ciència - CEIP Collserola
19 Nov, 2013

Agujeros Negros: de la ficción y la especulación a la realidad
18a Setmana de la Ciència - CRP Ripollet
20 Nov, 2013

Introducció a la Física Teòrica: Quarks, Forats Negres, Cosmologia i Cordes
Co-coordinator of Summer project for High School Students of the Excellence Program CiMs - Cellex.
10 Jun, 2014

Agujeros negros: espacio-tiempo al límite
Talk for students of Centre de Formació Interdisciplinària Superior - UPC
1 Oct, 2014

Energía
19a Setmana de la Ciència - CEIP Collserola
4 Nov, 2014

Hasta el infinito, y más allá! De los agujeros negros a los confines del cosmos
La Ciència en primera persona. Dia de la Ciència a les Escoles, Setmana de la Ciència - CRP Vallès Occidental III
19 Nov, 2014

¿Fuego en el horizonte?
Divulgative article in "Investigación y Ciencia" (Spanish edition of Scientific American), Investigación y Ciencia, Abril 2015, p.20
1 Apr, 2015

Pessics de Ciència - Ciència de pel·lícula: Interstellar
Video - Commentary on the movie "Interstellar"
21 May, 2015

Benasque conCiencia
Entrevista sobre gravedad, agujeros negros etc
21 Jul, 2015

El agujero negro convertido en estrella de cine - Ciencia y ficción en Interstellar
Book review for "Investigación y Ciencia"
1 Sep, 2015

Benvinguts al futur
Radio interview at RAC1
21 Oct, 2015

¿Viajes en el tiempo? Sí, pero "entre comillas"
Interview for Gonzoo
21 Oct, 2015

La polarización de la luz
20a Setmana de la Ciència - CEIP Collserola
3 Nov, 2015

Hasta el infinito, y más allá! De los agujeros negros a los confines del cosmos
La Ciència en primera persona. Dia de la Ciència a les Escoles, Setmana de la Ciència - CRP Vallès Occidental IV
18 Nov, 2015

La polarización de la luz
20a Setmana de la Ciència - Institut Joaquima Pla i Farreras
18 Nov, 2015

Diez preguntas para entender la teoría de la relatividad general de Einstein
Interview for Agencia SINC on the Centenary of the Theory of General Relativity. Also featured in:
Diario Público and El Diari de l'Educació
25 Nov, 2015

Centenary of General Relativity - Luciérnagas: Ciencia al Día
Radio interview and Blog entry
1 Dec, 2015

Cien años de Relatividad
Public conference at CC Sant Josep, Hospitalet de Llobregat -- "Pessics de Ciéncia"
20 Jan, 2016

Ondas gravitacionales
Radio interview for Xarxa de Comunicació Local de Catalunya (cugat.cat)
8 Jan, 2016

La detección de ondas gravitatorias - Notícies 3/24
TV Interview
11 Feb, 2016

El mayor espectáculo del universo - Artículo en La Vanguardia
Newspaper article
13 Feb, 2016

Ecos de las ondas que dieron la razón a Einstein - Agencia SINC
Magazine interview
13 Feb, 2016

Les ones gravitacionals - Cafès Científics
Divulgative coffee-talk at Cafès Científics, Fundació Ciència en Societat, Casa Orlandai, Sarrià
15 Jan, 2016

Ones gravitatoris - Physis - Campus d'Estiu de Física
Divulgative talk for high school students. Physis - Campus d'Estiu de Física de la UB
17 Jun, 2016

Forats negres
Radio interview for Xarxa de Comunicació Local de Catalunya (cugat.cat)
2 Aug, 2016

Teoria de cordes
Radio interview for Xarxa de Comunicació Local de Catalunya (cugat.cat)
2 Aug, 2016

Cómo fusionar dos agujeros negros de forma sencilla - Agencia SINC
Magazine article
7 Sep, 2016

Agujeros negros y ondas gravitatorias - La oscuridad sonora del Universo
Divulgative talk in the 3r Festival d'Astronomia del Montsec, at Institut d'Estudis Ilerdencs de Lleida
4 Oct, 2016

La noticia del año: Ondas gravitatorias
20a Setmana de la Ciència - CEIP Collserola
16 Nov, 2016

¡Hasta el infinito, y más alla! De los agujeros negros a los confines del cosmos
La Ciència en primera persona. Dia de la Ciència a les Escoles, Setmana de la Ciència - CRP Vallès Occidental III
16 Nov, 2016

Agujeros negros y ondas gravitatorias - La oscuridad sonora del Universo
Divulgative talk at Associació Astronòmica Sant Cugat-Valldoreix
6 Apr, 2017

¡Hasta el infinito, y más alla! De los agujeros negros a los confines del cosmos
La Ciència en primera persona. Dia de la Ciència a les Escoles, Setmana de la Ciència - CRP del Baix Llobregat III
15 Nov, 2017

“Iluminando el lado oscuro del Universo”
Book - Published by Editorial Ariel
6 Feb 2018

Las negras amnesias del cielo: tiempo, olvido y cuántica en los agujeros negros (Homenaje a Stephen Hawking)
Divulgative talk at Associació Astronòmica Sant Cugat-Valldoreix
22 mar, 2018

La oscuridad sonora del Universo: agujeros negros, ondas gravitatorias, y otras melodías de Einstein
Public conference at CC Sant Josep, Hospitalet de Llobregat -- "Pessics de Ciència"
25 Apr, 2018

Universo Stephen Hawking
Millenium, La 2 RTVE
1 May 2018

Las negras amnesias del cielo: tiempo, olvido y cuántica en los agujeros negros (Homenaje a Stephen Hawking)
Public conference at CC Sant Josep, Hospitalet de Llobregat -- "Pessics de Ciència"
23 May, 2018

Stephen Hawking — El tiempo, el olvido, y la cuántica en los agujeros negros
Public conference at XI Jornades per la divulgació de la Relativitat, Agrupació Astronòmica de Terrassa
26 May, 2018

Agujeros negros, ondas gravitatorias, y otras melodías de Einstein
Public conference at Escola d'enginyeria de Terrassa
29 Jun, 2018

CineCiencia. "Interstellar
Palencia
7 Sep, 2018

Hay Festival. Entrevistas de prensa y radio en: BBC News World; Ahora Noticias (Chile); El Peruano, El Comercio, Canal N, Radio RPP (Perú) .
7-11 Nov, 2018

Hay Forum Santiago de Chile - Misterios del Universo. Roberto Emparan en conversación con Paloma Ávila
7 Nov, 2018

Hay Festival Arequipa (Perú) - La ciencia en las orillas. Roberto Emparan en conversación con Dante Trujillo
10 Nov, 2018

Hay Festival Arequipa (Perú) - La Música del Universo. Roberto Emparan en conversación con Clara Elvira Ospina
11 Nov, 2018

Stephen Hawking: de los agujeros negros a la Teoría del Todo
Semana de la Ciencia 2018 - Institut Joaquima Pla i Farreras, Sant Cugat del Vallès
16 Nov, 2018

Hasta el infinito, ¡y más allá! Agujeros negros, ondas gravitatorias y los límites del Universo
Semana de la Ciencia 2018 - INS Rafael Casanova, Sant Boi de Llobregat
20 Nov, 2018

Las negras amnesias del cielo: Tiempo, olvido y cuántica en los agujeros negros (Homenaje a S. Hawking)
Biblioteca Jaume Fuster, Barcelona
22 Nov, 2018

Agujeros negros, ondas gravitatorias y otras melodías de Einstein
Riells i Viabrea (Girona)
22 Nov, 2018

Stephen Hawking: el tiempo, el olvido y la cuántica en los agujeros negros
Aula d'Extensió Universitària de Santa Perpètua de Mogoda
8 Jan, 2019

Stephen Hawking: de los agujeros negros a la Teoría del Todo
INS Salvador Dalí, El Prat de Llobregat
16 Jan, 2019

Stephen Hawking: de los agujeros negros a la Teoría del Todo
50 aniversario de la ZTF-FCT, UPV-EHU. Bizkaia Aretoa, Bilbao
21 Mar, 2019

El Cosmos Medieval
Associació Astronòmica Sant Cugat-Valldoreix
28 mar, 2019

Ondas gravitatorias
Universitat de l'Experiència, Universitat de Barcelona
14/May/2019.

Of Funnels, Rivers And Trampolines: The Perils Of Conveying Spacetime Curvature To The Uninitiated
Outreach session at GR22-International Conference on General Relativity and Gravitation, Valencia
09/Jul/2019.

Hay Festival Querétaro (México) - Roberto Emparan en conversación con José Carlos Arredondo Velázquez · UTEC
05/Sep/2019.

Hay Festival Querétaro (México) - Roberto Emparan en conversación con Jorge Comensal
05/Sep/2019.

Hay Festival Querétaro (México) - Agujeros negros y ondas gravitatorias - UNAM Juriquilla
06/Sep/2019.

Ciencia en el Hay Festival Querétaro - W radio / Transmisión especial "Fin de Semana" · W radio / Transmisión especial "Fin de Semana"
07/Sep/2019.

Agujeros negros; entre la ficción y la realidad · Interview for Gestoría Cultural
07/Sep/2019.

Ciencia en el Hay Festival Querétaro - Entrevistas radio y prensa · Entrevistas presenciales 1:1 para los siguientes medios de comunicación: Crónica, La Jornada, Notimex, Radio Mexiquense, Canal 22 (Karen o H), Canal 11, Noticias de Qro, TV UAQ
07/Sep/2019.

Ciencia en el Hay Festival Querétaro - Conferencia de Prensa · Conferencia de Prensa en el Gran Hotel Querétaro
07/Sep/2019.

Stephen Hawking, de los agujeros negros a la teoría del todo -L'Astrònòmica de Sabadell · Talk at Agrupació Astronòmica de Sabadell
23/Oct/2019.

Stephen Hawking, de los agujeros negros a la teoría del todo - Foro Diletantes Bilbao · Talk at Foro Diletantes Bilbao
22/Nov/2019.

Radio Interview - 100 años de la teoría de Einstein · Radio 4 Boca a orella
2/Dec/2019.

Fusión de agujeros negros - 'El Pou', Xarxa de Comunicació Local de Catalunya · Radio interview for 'El Pou' at Cugat.cat for Xarxa de Comunicació Local de Catalunya
09/Jul/2020.

Ondas gravitatorias - Online lecture · Universitat de l'Experiència, Universitat de Barcelona
21/Sep/2020.

Radio Interview - 2020 Nobel Prize for Physics · Interview for Radio Francia Internacional on the Nobel Prize for Physics
06/Oct/2020.

Singularidades - Evento Penrose SEGRE · Online round table on the occasion of the Nobel Award in Physics to Roger Penrose
11/Nov/2020.

Other merits

Merits related to quality and dissemination of research activity results

Two articles selected by American Physical Society, *Physical Review FOCUS*:

“Quantization of AdS₃ Black Holes in External Fields: Semiclassical Results from Pure Gravity”, Phys. Rev. Lett. **81** (1998) 2408 (in collaboration with Ivo Sachs). <http://focus.aps.org/v2/st13.html>

“A Rotating Black Ring in Five Dimensions”, Phys. Rev. Lett. **88** (2002) 101101 (in collaboration with Harvey Reall). <http://focus.aps.org/v9/st13.html>

Nature Physics - Research Highlights: “In brief: rotating black rings” (about Phys. Rev. Lett. **88** (2002) 101101), <http://www.nature.com/physics/highlights/6875-4.html>

Merits related to research activity

5th Award, Gravity Research Foundation 2002

Referee (> 200 articles) for: Physical Review Letters, Physical Review D, Journal of High Energy Physics, Physics Letters **B**, Nuclear Physics **B**, International Journal of Modern Physics **A**, Modern Physics Letters **A**, Journal of Cosmology and Astroparticle Physics, Classical and Quantum Gravity, European Physics Journal **C**, Journal of Mathematical Physics, Journal de Physique I, Foundations of Physics.

Citation Statistics (Jan 2021):

Total number of citations: ~12100 (InSPIRE <http://inspirehep.net>) ~14000 (Google Scholar)

h-index = 55 (SPIRES) 59 (Google Scholar)

Most cited papers:

R.Emparan, H.S.Reall, Phys.Rev.Lett. 88, 101101 (2002). Times cited: 870 (SPIRES) 1069 (Google Scholar)
A. Chamblin, R.Emparan, C.V.Johnson, R.C.Myers, Phys.Rev.D 60 (1999) 064018. Times cited: 977 (SPIRES) 1117 (Google Scholar)

Merits associated with predoctoral academic training

Premio extraordinario de Licenciatura de la Facultad de Ciencias, Sección Físicas, de la Universidad del País Vasco. Curso 1989-90.

Premio extraordinario de Doctorado de la Facultad de Ciencias, de la Universidad del País Vasco. Curso 1995-96.