Dr David Mateos

Institució Catalana de Recerca i Estudis Avançats (ICREA)
and
Departament de Física Quàntica i Astrofísica (FQA) & Institut de Ciències del Cosmos (ICC)
Universitat de Barcelona

Tel: +34 93 403 9714 **Fax:** +34 93 402 1155 **Email:** dmateos@fqa.ub.edu

Web page: http://www.icrea.cat/Web/ScientificStaff/David-Mateos-465

Personal Details

Date of Birth: May 8, 1974 **Sex:** Male **Nationality:** Spanish

Present Position

ICREA Research Professor, July 2008-present at the Department of Quantum Physics and Astrophysics, University of Barcelona, Spain.

Postdoctoral Positions

Oct 2005-June 2008 Physics Department, University of California at Santa Barbara, USA.

Oct 2002-Sep 2005 Perimeter Institute for Theoretical Physics, Waterloo, Ontario, Canada.

Oct 2000-Sep 2002 Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK.

Education

PhD in Physics, Oct 1996-May 2000 University of Barcelona. Advisor: Professor Joaquim Gomis. Title: 'Spacetime Physics from Worldvolume Branes'.

BSc in Physics, Sep 1992-Oct 1996 University of Barcelona, Spain (first class Honours).

PUBLICATIONS[1] (available online from Google Scholar and SPIRES)

Citation count according to Google Scholar: 7,400+ | Citations/paper: 92 | h index: 39

ARTICLES IN JOURNALS

[1] Y. Bea, J. Casalderrey-Solana, T. Giannakopoulos, A. Jansen, D. Mateos, M. Sanchez-Garitaonandia and M. Zilhão, "Gravitational waves from holographic bubble collisions," to appear.

[2] Y. Bea, J. Casalderrey-Solana, T. Giannakopoulos, A. Jansen, D. Mateos, M. Sanchez-Garitaonandia and M. Zilhão, "Holographic bubbles: Expanding, collapsing and critical," to appear.

[3] Y. Bea, J. Casalderrey-Solana, T. Giannakopoulos, A. Jansen, S. Krippendorf, D. Mateos, M. Sanchez-Garitaonandia and M. Zilhão, "Spinodal Gravitational Waves," [arXiv:2112.15478 [hep-th]].

[4] Y. Bea, J. Casalderrey-Solana, T. Giannakopoulos, D. Mateos, M. Sanchez-Garitaonandia and M. Zilhão, "Domain Collisions," [arXiv:2111.03355 [hep-th]].

[5] C. Ecker, W. van der Schee, D. Mateos and J. Casalderrey-Solana, "Holographic Evolution with Dynamical Boundary Gravity," [arXiv:2109.10355 [hep-th]].

[6] A. F. Faedo, C. Hoyos, D. Mateos and J. G. Subils, "Multiple Mass Hierarchies from Complex Fixed Point Collisions," [arXiv:2106.01802 [hep-th]].

[7] Y. Bea, J. Casalderrey-Solana, T. Giannakopoulos, D. Mateos, M. Sanchez-Garitaonandia and M. Zilhão, "Bubble wall velocity from holography," Phys. Rev. D **104** (2021) no.12, L121903 [arXiv:2104.05708 [hep-th]].

[8] J. Casalderrey-Solana, C. Ecker, D. Mateos and W. Van Der Schee, "Strong-coupling dynamics and entanglement in de Sitter space," JHEP **03** (2021), 181 [arXiv:2011.08194 [hep-th]].

[9] Y. Bea, O. J. C. Dias, T. Giannakopoulos, D. Mateos, M. Sanchez-Garitaonandia, J. E. Santos and M. Zilhao, "Crossing a large-N phase transition at finite volume," JHEP **02** (2021), 061 [arXiv:2007.06467 [hep-th]].

[10] D. Elander, A. F. Faedo, D. Mateos and J. G. Subils, "Phase transitions in a three-dimensional analogue of Klebanov-Strassler," JHEP **06** (2020), 131 [arXiv:2002.08279 [hep-th]].

[11] H. Bantilan, P. Figueras and D. Mateos, "Real-time Dynamics of Plasma Balls from Holography," Phys. Rev. Lett. **124** (2020) no.19, 191601 [arXiv:2001.05476 [hep-th]].

[1] Authors in my field are listed alphabetically.

[12] A. F. Faedo, C. Hoyos, D. Mateos and J. G. Subils, "Holographic Complex Conformal Field Theories," Phys. Rev. Lett. **124** (2020) no.16, 161601 [arXiv:1909.04008 [hep-th]].

[13] A. F. Faedo, D. Mateos, C. Pantelidou and J. Tarrío, "Spectrum of a Supersymmetric Color Superconductor," JHEP **11** (2019), 020 [arXiv:1909.00227 [hep-th]].

[14] M. Attems, Y. Bea, J. Casalderrey-Solana, D. Mateos and M. Zilhão, "Dynamics of Phase Separation from Holography," JHEP **01** (2020), 106 [arXiv:1905.12544 [hep-th]].

[15] D. Elander, A. F. Faedo, D. Mateos, D. Pravos and J. G. Subils, "Mass spectrum of gapped, non-confining theories with multi-scale dynamics," JHEP **05** (2019), 175 [arXiv:1810.04656 [hep-th]].

[16] A. F. Faedo, D. Mateos, C. Pantelidou and J. Tarrío, "A Supersymmetric Color Superconductor from Holography," JHEP **05** (2019), 106 [arXiv:1807.09712 [hep-th]].

[17] M. Attems, Y. Bea, J. Casalderrey-Solana, D. Mateos, M. Triana and M. Zilhão, "Holographic Collisions across a Phase Transition," Phys. Rev. Lett. **121** (2018) no.26, 261601 [arXiv:1807.05175 [hep-th]].

[18] Y. Bea and D. Mateos, "Heating up Exotic RG Flows with Holography," JHEP **08** (2018), 034 [arXiv:1805.01806 [hep-th]].

[19] A. F. Faedo, D. Mateos, C. Pantelidou and J. Tarrio, "Towards a Holographic Quark Matter Crystal," JHEP **10** (2017), 139 [erratum: JHEP **07** (2019), 058] [arXiv:1707.06989 [hep-th]].

[20] M. Attems, J. Casalderrey-Solana, D. Mateos, D. Santos-Oliván, C. F. Sopuerta, M. Triana and M. Zilhão, "Paths to equilibrium in non-conformal collisions," JHEP **06** (2017), 154 [arXiv:1703.09681 [hep-th]].

[21] M. Attems, Y. Bea, J. Casalderrey-Solana, D. Mateos, M. Triana and M. Zilhao, "Phase Transitions, Inhomogeneous Horizons and Second-Order Hydrodynamics," JHEP **06** (2017), 129 [arXiv:1703.02948 [hep-th]].

[22] A. F. Faedo, D. Mateos, D. Pravos and J. G. Subils, "Mass Gap without Confinement," JHEP **06** (2017), 153 [arXiv:1702.05988 [hep-th]].

[23] A. F. Faedo, D. Mateos, C. Pantelidou and J. Tarrio, "Holography with a Landau pole," JHEP **02** (2017), 047 [arXiv:1611.05808 [hep-th]].

[24] A. F. Faedo, D. Mateos, C. Pantelidou and J. Tarrio, "Unquenched flavor on the Higgs branch," JHEP **11** (2016), 021 [arXiv:1607.07773 [hep-th]].

[25] J. Casalderrey-Solana, D. Mateos, W. van der Schee and M. Triana, "Holographic heavy ion collisions with baryon charge," JHEP **09** (2016), 108 [arXiv:1607.05273 [hep-th]].

[26] M. Attems, J. Casalderrey-Solana, D. Mateos, D. Santos-Oliván, C. F. Sopuerta, M. Triana and M. Zilhão, "Holographic Collisions in Non-conformal Theories," JHEP **01** (2017), 026 [arXiv:1604.06439 [hep-th]].

[27] M. Attems, J. Casalderrey-Solana, D. Mateos, I. Papadimitriou, D. Santos-Oliván, C. F. Sopuerta, M. Triana and M. Zilhão, "Thermodynamics, transport and relaxation in non-conformal theories," JHEP **10** (2016), 155 [arXiv:1603.01254 [hep-th]].

[28] A. F. Faedo, A. Kundu, D. Mateos, C. Pantelidou and J. Tarrío, "Three-dimensional super Yang-Mills with compressible quark matter," JHEP **03** (2016), 154 [arXiv:1511.05484 [hep-th]].

[29] A. F. Faedo, D. Mateos and J. Tarrio, "Three-dimensional super Yang-Mills with unquenched flavor," JHEP **07** (2015), 056 [arXiv:1505.00210 [hep-th]].

[30] A. F. Faedo, A. Kundu, D. Mateos and J. Tarrio, "(Super)Yang-Mills at Finite Heavy-Quark Density," JHEP **02** (2015), 010 [arXiv:1410.4466 [hep-th]].

[31] D. Elander, A. F. Faedo, C. Hoyos, D. Mateos and M. Piai, "Multiscale confining dynamics from holographic RG flows," JHEP **05** (2014), 003 [arXiv:1312.7160 [hep-th]].

[32] J. Casalderrey-Solana, M. P. Heller, D. Mateos and W. van der Schee, "Longitudinal Coherence in a Holographic Model of Asymmetric Collisions," Phys. Rev. Lett. **112** (2014) no.22, 221602 [arXiv:1312.2956 [hep-th]].

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[40] J. Casalderrey-Solana and D. Mateos, "Off-diagonal Flavour Susceptibilities from AdS/CFT," JHEP **08** (2012), 165 [arXiv:1202.2533 [hep-ph]].

[41] D. Mateos and D. Trancanelli, "Thermodynamics and Instabilities of a Strongly Coupled Anisotropic Plasma," JHEP **07** (2011), 054 [arXiv:1106.1637 [hep-th]].

[42] D. Mateos and D. Trancanelli, "The anisotropic N=4 super Yang-Mills plasma and its instabilities," Phys. Rev. Lett. **107** (2011), 101601 [arXiv:1105.3472 [hep-th]].

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[44] J. Casalderrey-Solana, D. Fernandez and D. Mateos, "Cherenkov mesons as in-medium quark energy loss," JHEP **11** (2010), 091 [arXiv:1009.5937 [hep-th]].

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Selected as *Editor's choice* and as a *Synopsis* in *Physics*.

[46] J. Casalderrey-Solana and D. Mateos, "Prediction of a Photon Peak in Relativistic Heavy Ion Collisions," Phys. Rev. Lett. **102** (2009), 192302 [arXiv:0806.4172 [hep-ph]].

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[65] D. Mateos, T. Mateos and P. K. Townsend, "Supersymmetry of tensionless rotating strings in AdS(5) x S**5, and nearly BPS operators," JHEP **12** (2003), 017 [arXiv:hep-th/0309114 [hep-th]].

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Conference Proceedings

[79] M. Attems, Y. Bea, J. Casalderrey-Solana, D. Mateos, D. Santos-Oliván, C. F. Sopuerta, M. Triana and M. Zilhão, "Paths to equilibrium in non-conformal collisions," EPJ Web Conf. **175** (2018), 07030

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Books

[85] J. Casalderrey-Solana, H. Liu, D. Mateos, K. Rajagopal and U. A. Wiedemann, "Gauge/String Duality, Hot QCD and Heavy Ion Collisions," [arXiv:1101.0618 [hep-th]], published by Cambridge University Press (2014), ISBN: 9781107022461.

Research Grants

As Principal Investigator

1. **Project Title**: Maria Zambrano fellowship
   Funding agency: Ministerio de Universidades (Spanish Government)
   Reference:
   Amount: 99,500.00 euros
   Years: 2022-2024
   Principal Investigator: David Mateos
   Recipient: Yago Bea

2. **Project Title**: Towards an information-theoretic description of quantum gravity: holography and beyond
   Funding agency: La Caixa Foundation (Junior Leader postdoctoral fellowship)
   Reference: LCF/BQ/PI21/11830029
   Amount: 300,000.00 euros
   Years: 2021-2024
   Principal Investigator: David Mateos
   Recipient: Juan Pedraza

3. **Project Title**: Extreme Holography
   Funding agency: Spanish Supercomputing Network
   Reference: FI-2021-3-0010
   Amount: 3 million hours with priority at Mare Nostrum (Barcelona HPC)
   Monetary equivalent: 150,000.00 euros
   Years: 2021-2022
   Principal Investigator: David Mateos

4. **Project Title**: Theory and phenomenology of fundamental interactions: Gravitation and Cosmology
   Funding agency: Ministerio de Ciencia e Innovación (Spanish Government)
   Reference/code: PID2019-105614GB-C22
   Amount: 205,700 euros
   Years: 2020 - 2023
   Principal investigators: David Mateos and Bartomeu Fiol

5. **Project Title**: Institute of Cosmos Sciences – Unit of Excellence Maria de Maeztu
   Funding agency: State Agency for Research of the Spanish Ministry of Science and Innovation
   Reference/code: CEX2019-000918-M
   Amount: 2,000,000.00 euros
   Years: 2020 - 2023

Principal Investigator of the overall project: Jordi Miralda Escude
Principal Investigator of one of the six priority lines: David Mateos
Amount of the priority line: 150,000.00 euros

6. **Project Title**: Extreme Holography
   Funding agency: Spanish Supercomputing Network
   Reference: FI-2021-1-0008
   Amount: 3 million hours (2.3 million with priority) at Mare Nostrum (Barcelona HPC)
   Monetary equivalent: 150,000.00 euros
   Years: 2021
   Principal Investigator: David Mateos

7. **Project Title**: Extreme Holography
   Funding agency: Spanish Supercomputing Network
   Reference: FI-2020-1-0007
   Amount: 3 million hours with priority at Mare Nostrum (Barcelona HPC)
   Monetary equivalent: 150,000.00 euros
   Years: 2020
   Principal Investigator: David Mateos

8. **Project Title**: Theory and Phenomenology of Holographic Color Superconductors
   Funding agency: Catalan Government ("Beatriu de Pinos" postdoctoral fellowship)
   Reference: 2017 BP 00228
   Amount: 92,000.00 euros
   Years: 2019-2021
   Principal Investigator: David Mateos
   Recipient: Christopher Rosen

9. **Project Title**: Doctoral fellowship
   Funding agency: Catalan Government
   Amount: 49,266.00 euros
   Years: 2019-2022
   Principal Investigator: David Mateos
   Recipient: Mikel Sánchez

10. **Project Title**: Doctoral fellowship
    Funding agency: Spanish Government
    Amount: 65,688.00 euros
    Years: 2017-2021
    Principal Investigator: David Mateos
    Recipient: Javier G. Subils

11. **Project Title**: ShockWave Evolved Collisions
    Funding agency: Spanish Supercomputing Network
    Amount: 1 million hours with priority at Mare Nostrum (Barcelona HPC)

Monetary equivalent: 50,000.00 euros
Years: 2016-2019
Principal Investigator: David Mateos

12. **Project Title**: Fast Thermalization of the Quark-Gluon Plasma
Funding agency: European Union (Marie Sklodowska-Curie individual Fellowships)
Reference/code: H2020-MSCA-IF-2014 Project 658574 - FastTh
Amount: 158,121.60 euros
Years: September 1 2015 - August 31 2017
Principal Investigator: David Mateos
Recipient: Maximilian Attems

13. **Project Title**: Institute of Cosmos Sciences – Maria de Maeztu Distinction of Excellence
Funding agency: Ministerio de Economia y Competitividad (Spanish Government)
Reference/code: MDM-2014-0369
Amount: 2,000,000.00 euros
Years: July 1 2015 - June 30 2019
Principal Investigator of the overall project: Josep Maria Paredes Poy
Principal Investigator of one of the eight priority lines: David Mateos
Amount of the priority line: 211,376.00 euros

14. **Project Title**: Doctoral fellowship
Funding agency: Spanish Government
Reference: BES-2014-068071
Amount: 65,688.00 euros
Years: 2015-2019
Principal Investigator: David Mateos
Recipient: David Pravos Fernandez

15. **Project Title**: Holography for the LHC era
Funding agency: European Research Council
Reference/code: Starting Grant HoloLHC - 306605
Amount: 1,419,424.00 euros
Years: Oct 2012 - Sep 2017
Principal Investigator: David Mateos

16. **Project Title**: "Juan de la Cierva" postdoctoral fellowship
Funding agency: Ministerio de Ciencia e Innovación (Spanish Government)
Reference: JCI-2011-10434
Amount: 126,816.00 euros
Years: 2012-2015
Principal Investigator: David Mateos
Recipient: Javier Tarrío

17. **Project Title**: "Beatriu de Pinos" postdoctoral fellowship
    Funding agency: Generalitat de Catalunya (Catalan Government)
    Reference: 2011BP B00073
    Amount: 77,136.35 euros
    Years: 2012-2014
    Principal Investigator: David Mateos
    Recipient: Ayan Mukhopadhyay (declined)

18. **Project Title**: Postdoctoral fellowship
    Funding agency: Mexico's National Council of Science and Technology (CONACyT)
    Amount: 25,000.00 USD
    Years: 2010
    Principal Investigator: David Mateos
    Recipient: Mariano Chernicoff

19. **Project Title**: Doctoral fellowship
    Funding agency: Spanish Government
    Amount: 54,816.00 euros
    Years: 2009-2013
    Principal Investigator: David Mateos
    Recipient: Daniel Fernández

20. **Project Title**: Gravitation, Particles and Strings
    Funding agency: Catalan Government
    Reference/code: 2009-SGR-168
    Amount: 44,720.00 euros
    Years: 2009-2013
    Principal Investigator: David Mateos

As Participant/Research team member

1. **Project Title**: Gravitation, Strings and Cosmology
   Funding agency: Catalan Government
   Reference/code: 2017-SGR-754
   Amount: 65,896 euros
   Years: from 2018 to 2020
   Principal Investigator: Bartomeu Fiol

2. **Project Title**: Theory and phenomenology of fundamental interactions: Particle physics and the unification of forces
   Funding agency: Spanish Government
   Reference/code: FPA2016-76005-C2-1-P
   Amount: 363,000 euros
   Years: from 2017 to 2019
   Principal Investigator: Maria Concepcion Gonzalez Garcia and Domenec Espriu

3. **Project Title**: Theory and phenomenology of fundamental interactions: Gravitation and Cosmology
   Funding agency: Spanish Government
   Reference/code: FPA2016-76005-C2-2-P
   Amount: 175,000 euros
   Years: from 2017 to 2019
   Principal investigators: Jaume Garriga and Bartomeu Fiol

4. **Project Title**: Theory and phenomenology of fundamental interactions: Gravitation and Cosmology
   Funding agency: Spanish Government
   Reference/code: FPA2013-46570-C2-2-P
   Amount: 175,000 euros
   Years: from 2014 to 2016
   Principal investigators: Roberto Emparan and Bartomeu Fiol

5. **Project Title**: Theory and phenomenology of fundamental interactions: Particle physics and the unification of forces
   Funding agency: Spanish Government
   Reference/code: FPA2013-46570-C2-1-P
   Amount: 300,000 euros
   Years: from 2014 to 2016
   Principal investigators: Domenec Espriu and Federico Mescia

6. **Project Title**: National Center for Particle, Astroparticle and Nuclear Physics
   Funding agency: Programa Consolider Ingenio 2010
   Reference/code: CSD2007-00042

Amount: 10,000,000 euros (to be shared by multiple Spanish groups)
Years: from 2007 to 2012
Coordinator: Antonio Pich
Principal Investigator: Lluis Garrido Beltran

7. **Project Title**: Theory and phenomenology of fundamental interactions: Gravitation and Cosmology
Funding agency: Spanish Government
Reference/code: FPA2010-20807-C02-02
Amount: 257,609 euros
Years: from 2011 to 2013
Principal Investigator: Roberto Emparan

8. **Project Title**: Theory and phenomenology of fundamental interactions: Particle physics and the unification of forces
Funding agency: Spanish Government
Reference/code: FPA2010-20807-C02-01
Amount: 348,900 euros
Years: from 2011 to 2013
Principal Investigator: Domenec Espriu

9. **Project Title**: Gravitation
Funding agency: Catalan Government
Reference/code: 2005-SGR-82
Amount: 41,200 euros
Years: from 2005 to 2009
Principal Investigator: Roberto Emparan

10. **Project Title**: Theory and Phenomenology of fundamental interactions: Gravitation and Cosmology
Funding agency: Spanish Government
Reference/code: FPA2007-66665-C02-02
Amount: 199,500 euros
Years: from 2007 to 2010
Principal Investigator: Jaume Garriga Torres

11. **Project Title**: Theory and Phenomenology of fundamental interactions
Funding agency: Spanish Government
Reference/code: FPA2007-66665-C02-01
Amount: 393,492 euros
Years: from 2007 to 2010
Principal Investigator: Domenec Espriu

12. **Project Title**: Teorias cuanticas efectivas y fundamentales
Funding agency: Spanish Government

Reference/code: AEN98-0431
Amount: 217,000 euros
Years: from 1998 to 2001
Principal Investigator: Domenec Espriu

Training and Supervision

I am one of only three researchers at the Institute for Cosmos Sciences (ICC) who have received an ERC Grant. For this reason, I am part of the ICC committee in charge of guiding other researchers towards successful ERC applications.

I am a prolific mentor. Since my arrival at ICREA and U Barcelona in 2008 i have supervised the following researchers:

Postdocs: Dr A. Serantes, Sep 2021-present.
Dr J. Pedraza, Sep 2021-Feb 2022. Then long-term position at IFT Madrid (Spain).
Dr C. Rosen, June 2019-July 2021. Now Marie Curie fellow at U Crete (Greece).
Dr Y. Bea, Oct 2016-Sep 2019. Now postdoc at U Helsinki (UK).
Dr A. Faedo, Oct 2013-Dec 2019. Now faculty at U Oviedo (Spain).
Dr D. Elander, June 2016-Dec 2018. Now postdoc at U Montpellier (France).
Dr M. Attems, Sep 2015-Sep 2017. Now postdoc at CERN (Switzerland).
Dr M. Zilhão, Oct 2014-Aug 2017. Now long-term position at IST, Lisbon (Portugal).
Dr C. Pantelidou, Sep 2014-Sep 2017. Now long-term at Trinity College Dublin(Ireland).
Dr J. Tarrio, Oct 2012-Sep 2015. Now postdoc at U Helsinki (Finland).
Dr A. Kundu, Dec 2013-Dec 2014. Now faculty at Saha Inst. of Nucl. Phys. (India).
Dr P. G. Camara, Oct 2011-Aug 2014. Now faculty at U Pennsylvania (USA).
Dr M. Chernicoff, Jan 2010-Nov 2011. Now faculty at UNAM (Mexico).
Dr A. Paredes, Oct 2009-Jan 2011. Now faculty at U Vigo (Spain).

PhD: Mikel Sanchez, Sep 2018-present.
Javier G. Subils, June 2016-Aug 2021.
David Pravos, March 2015-Nov 2019. Now in private sector.
Miquel Triana Iglesias, Sep 2013-Sep 2017. Now works on Big Data in private sector.
Daniel Fernández, Oct 2008-June 14, 2013. Now postdoc at U. of Iceland.

Master: Yash Kumar, Feb 2020-Dec 2021.
Aniol Sala, September 4, 2020.
Miguel Frias, September 2, 2019.
Utpal Sarkar, September 7, 2018.
Mikel Sanchez Garitaonandia, June 20, 2018.
Daniel Perez Cervera, June 2017.
Javier G. Subils, July 1, 2016.
Nikola Ivanov Gushterov, July 1, 2014.
Daniel Farre, September 6, 2013.
Teresa García, September 20, 2012.
Miguel Angel Martin, September 13, 2010.
Daniel Fernandez, July 3, 2009.

Conferences and Workshops

1. *TBA*, 'Confronting large N, holography, integrability and stringy models with the real world', Simons Centre for Geometry and Physics, New York, USA (April 2022) [online talk].
2. *Real-Time Dynamics of Plasma Balls (and Cosmological Bubbles) from Holography*, 'Applications of gauge topology, holography and string models to QCD', Simons Centre for Geometry and Physics, New York, USA (July 2021) [online talk].
3. *Strong-coupling dynamics and entanglement in de Sitter space*, 'Iberian Strings 2021', Lisbon, Portugal (Jan 2021) [online talk].
4. *Holographic Dynamics near a Critical Point*, 'The Dual Mysteries of Gauge Theories and Gravity', IIT Madras, India (Oct 2020) [online talk]
5. *Real-time Dynamics of Plasma Balls in a Confining Background*, 'Iberian Strings 2020', Santiago de Compostela, Spain (Jan 2020).
6. *Hydrodynamics near a critical point*, workshop on 'Theoretical Foundations of Relativistic Hydrodynamics', BIRS, Banff, Alberta, Canada (Nov 2019).
7. *Extreme Holography: From Heavy Ion Collisions to Neutron Star Mergers*, workshop on 'Gravity - New perspectives from strings and higher dimensions', Benasque Centre for Science, Benasque, Spain (Jul 2019).
8. *Holography at High Density*, 'Rencontres Théoriciens', Institut Henri Poincaré, Paris, France (June 2019).
9. *Extreme Holography*, 'Belgian Holography Meeting', Leuven, Belgium (Jan 2019).
10. *Extreme Holography*, 'HoloQuark2018', Santiago de Compostela, Spain (July 2018).
11. *Extreme Holography*, plenary talk at the '13th International Conference on Strong and Electroweak Matter (SEWM 2018)', Barcelona, Spain (June 2018).
12. *Extreme Holography*, 'Numerical approaches to holography, quantum gravity and cosmology', University of Edinburgh, Scotland (May 2018).
13. *Extreme Holography*, 'Fire and ice: Hot QCD meets cold and dense matter', Saariselka, Finland (Apr 2018).
14. *Extreme Holography*, 'Aspects of Time-dependent Holography', University of Amsterdam, The Netherlands (Dec 2017).
15. *Holography and Quark Matter*, 'Holographic dense QCD and neutron stars', ENS, Paris, France (Nov 2017).
16. *Extreme Holography*, 'Holography and Quantum Matter', IFT, Madrid, Spain (Sep 2017).
17. *Extreme Holography*, 'Canterbury Tales of Hot QFTs in the LHC Era', St John's college, Oxford, UK (July 2017).
18. *Extreme Holography*, 'Holography, gauge theory and black holes', STAG Research Centre, Southampton University, UK (April 2017).

19. *Holographic Heavy Ion Collisions*, 'The Big Bang and the little bangs - Non-equilibrium phenomena in cosmology and in heavy-ion collisions', CERN, Geneva, Switzerland (August 2016).
20. *Towards the String Dual of a Color Superconductor*, 'Numerical Relativity and Holography', Santiago de Compostela, Spain (June 2016).
21. *Some recent results on holographic approaches to equilibration*, '3rd International Conference on the Initial Stages in High-Energy Nuclear Collisions', Lisbon, Portugal (May 2016).
22. *Towards the String Dual of a Color Superconductor*, 'Equilibration Mechanisms in Weakly and Strongly Coupled Quantum Field Theory' workshop, Institute for Nuclear Theory, University of Washington, Seattle, USA (August 2015).
23. *Towards the String Dual of a Color Superconductor*, 'Gravity – New perspectives from strings and higher dimensions' workshop, Benasque, Spain (July 2015).
24. *Far-from-equilibrium Holography and Heavy Ion Collisions*, 'Gauge-gravity duality 2013' workshop, Max Planck Institute, Munich, Germany (July 2013).
25. *Far-from-equilibrium Holography and Heavy Ion Collisions*, 'Gravity – New perspectives from strings and higher dimensions' workshop, Benasque, Spain (July 2013).
26. *Far-from-equilibrium Holography and Heavy Ion Collisions*, 'String Theory' workshop, Benasque, Spain (July 2013).
27. *Discussion leader on Applications of gauge/string duality to QCD*, 'Holographic Thermalization' workshop, Lorentz Centre, Leiden, The Netherlands (Oct 2012).
28. *Strong Coupling Isotropization Simplified*, '10th International Conference on Strong and Electroweak Matter (SEWM 2012)', Swansea University, Swansea, UK (July 2012).
29. *Strong Coupling Isotropization Simplified*, 'Branes, Supergravity and M-Theory - A conference to celebrate the 60th birthday of Paul K Townsend', DAMTP, Cambridge University, Cambridge, UK (July 2012).
30. *Strong Coupling Isotropization Simplified*, 'Exploring AdS/CFT Dualities in Dynamical Settings' workshop, Perimeter Institute, Waterloo, Ontario, Canada (June 2012).
31. *Thermodynamics and Instabilities of a Strongly Coupled Anisotropic Plasma*, 'Frontiers in QCD' workshop, Institute for Nuclear Theory, University of Washington, USA (Nov 2011).
32. *Thermodynamics and Instabilities of a Strongly Coupled Anisotropic Plasma*, AdS/CFT-Heavy Ion Informal Meeting , Instituto de Fisica Teorica UAM/CSIC, Madrid, Spain (Oct 2011).
33. *Quarks, gluons and Black Holes: Gauge/gravity predictions for heavy ion collisions*, Numerical Relativity and High Energy Physics, Madeira, Portugal (Sep 2011).
34. *Applying the AdS/CFT correspondence to non-abelian plasmas*, Quark Matter 2011 (plenary talk), Annecy, France (May 2011).

35. *New results from the gauge/string duality: Quark energy loss and anisotropic plasmas*, Iberian Strings 2011, Valencia, Spain (Feb 2011).
36. *Universal String Predictions for Heavy Ion Collisions*, IVth Mini-workshop on String Theory, Oviedo, Spain (Nov 2010).
37. *New results from the gauge/string duality: Quark energy loss and anisotropic plasmas*, 3rd Informal Meeting on Strings and QCD, Salamanca, Spain (Sep 2010).
38. *New results from the gauge/string duality: Quark energy loss and anisotropic plasmas*, The first heavy ion collisions at LHC, CERN, Geneva, Switzerland (Sep 2010).
39. *Universal String Predictions for Heavy Ion Collisions*, Quarkonium and deconfined matter in the LHC era, Martina Franca, Italy (June 2010).
40. *Quarks, Gluons and Black Holes*, XII Mexican Workshop on Particles and Fields (plenary talk), Mazatlan, Mexico (Nov 2009).
41. *Two Universal String Predictions for Heavy Ion Collisions*, XII Mexican Workshop on Particles and Fields, Mazatlan, Mexico (Nov 2009).
42. *Two Universal String Predictions for Heavy Ion Collisions*, Spanish LHC Physics Network 1st Meeting, Granada, Spain (Oct 2009).
43. *Strings & QCD: A review*, Fluid-Gravity Correspondence workshop, Munich, Germany (Sep 2009).
44. *Two Universal String Predictions for Heavy Ion Collisions*, Applications of AdS/CFT to QCD, Porto, Portugal (Sep 2009).
45. *Two Universal String Predictions for Heavy Ion Collisions*, AdS Collective, Madrid, Spain (Feb 2009).
46. *Gauge/string duality and QCD*, Recent Developments in String/M-Theory and Field Theory, Berlin, Germany (Oct 2008).
47. *Flavour and Photons*, Informal Meeting on the AdS/CFT Connections with QCD and the Heavy Ions, Santiago de Compostela, Spain (Oct 2008).
48. *A Universal String Prediction for Heavy Ion Collisions*, Black Holes: A Landscape of Theoretical Physics Problems, CERN, Geneva, Switzerland (Sep 2008).
49. *Discussion panel on Nonperturbative QCD, QCD vacuum models, confinement versus strings*, Black Holes: A Landscape of Theoretical Physics Problems, CERN, Geneva, Switzerland (Sep 2008).
50. *A Universal String Prediction for Heavy Ion Collisions*, Quark Confinement and the Hadron Spectrum 2008, Mainz, Germany (Sep 2008).
51. *Prediction of a Photon Peak in Heavy Ion Collisions*, Hard Probes 2008 (plenary talk), Illa da Toxa, Galicia, Spain (June 2008).
52. *Universal Peaks in Holographic Photon Production*, String Methods for the Real World, Institute for Nuclear Theory, University of Washington, Seattle (May 2008).
53. *String Theory and RHIC Physics: The Fundamental Story*, UK Annual Theory Meeting, Durham, UK (Dec 2007).

54. *Bright Branes*, Gravitational Aspects of Strings and Branes, Granada, Spain (June 2007).
55. *String Theory and RHIC Physics: The Fundamental Story*, Strings 2007, Madrid, Spain (June 2007).
56. *Bright Branes*, Exotic States of Hot and Dense Matter and their Dual Description, Perimeter Institute, Waterloo, Ontario, Canada (May 2007).
57. *String Theory and RHIC Physics: The Fundamental Story*, Christmas Meeting, Barcelona, Spain (Dec 2006).
58. *String Theory and RHIC Physics: The Fundamental Story*, String Phenomenology, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, USA (Nov 2006).
59. *String Theory and RHIC Physics: The Fundamental Story*, Southern California Strings Seminar, University of Southern California, USA (Sep 2006).
60. *RHIC Physics and the gauge/gravity Correspondence*, Recent Advances in Black Hole Physics in String Theory, Aspen Centre for Physics, Aspen, Colorado, USA (Sep 2006).
61. *Fundamental Phase Transitions*, QCD and String Theory, Munich, Germany (July 2006).
62. *Fundamental Phase Transitions*, QCD and Strings, Benasque Centre for Physics, Benasque, Spain (July 2006).
63. *Supersymmetric Black Rings and Supertubes*, Strings and Branes, Benasque Centre for Physics, Benasque, Spain (July 2005).
64. *Supersymmetric Black Rings and Supertubes*, American Physical Society Meeting, Tampa, Florida (April 2005).
65. *Supersymmetric Black Rings and Supertubes*, Gravitational Aspects of String Theory, Fields Institute, Toronto, Canada (May 2005),
66. *Towards a Holographic Dual of Large-N QCD*, Large-N QCD, Trento, Italy (July 2004).
67. *Towards a Holographic Dual of Large-N QCD*, Hadrons and Strings, Trento, Italy (July 2004).
68. *Towards a Holographic Dual of Large-N QCD*, QCD and Strings, Kavli Institute for Theoretical Physics, University of California, Santa Barbara, USA (Nov 2004).
69. *Towards a Holographic Dual of Large-N QCD*, Christmas Meeting, University of Barcelona, Spain (Dec 2003).
70. *Towards a Holographic Dual of Large-N QCD*, Christmas Meeting, Instituto de Fisica Teorica UAM/CSIC, Madrid, Spain (Dec 2003).
71. *Supersymmetry of Rotating Strings in $AdS_5 \times S^5$ and Nearly-BPS Operators*, 3rd Symposium on Quantum Theory and Symmetries, Cincinnati, USA (Sep 2003).
72. *Meson Spectroscopy from AdS/CFT with Flavour*, QCD and Strings, Michigan Center for Theoretical Physics, USA (April 2003).
73. *AdS/CFT with Defects, and Supertubes*, CITA Meeting, Perimeter Institute, Waterloo, Ontario, Canada (Oct 2002).
74. *Supertubes*, RTN meeting, Isaac Newton Institute, Cambridge, UK (Feb 2002).

75. *Supertubes*, Christmas Meeting, Instituto de Fisica Teorica UAM/CSIC, Madrid, Spain (Dec 2001).

76. *Supertubes*, Christmas Meeting, University of Barcelona, Spain (Dec 2001).

77. *Meson Mass Spectrum from Type 0 String Theory*, XXVII Reunión Bienal de la Real Sociedad Española de Física, Valencia, Spain (Sep 1999).

Colloquia

1. *Holography in the Gravitational Wave Era*, Max Planck Institute for Theoretical Physics (Albert Einstein Institute), Potsdam, Germany (May 2021) [online talk].
2. *Extreme Holography*, Institute for Theoretical Physics, Utrecht University, Netherlands (May 2017).
3. *Quarks, Gluons and Black Holes*, Nuclear and Particle Physics Colloquium, MIT, Boston, USA (Nov 2011).
4. *Quarks, Gluons and Black Holes*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (June 2011).
5. *String Theory and Quantum Chromodynamics*, University of California, San Diego, USA (March 2007).
6. *String Theory and Quantum Chromodynamics*, Brandeis University, Boston, USA (Feb 2007).
7. *Gravitational Physics in String Theory: From Black Holes to Quantum Chromodynamics*, Cambridge University, UK (Feb 2007).
8. *Black Holes, Black Rings and Beyond*, MIT, Boston, USA (Feb 2006).

Other Invited Talks

1. *Holography in the Gravitational Wave Era*, Kentucky University (Feb 2022) [online talk].
2. *Holography in the Gravitational Wave Era*, Würzburg University (Jan 2022) [online talk].
3. *Holography in the Gravitational Wave Era*, U Oviedo (Jan 2022).
4. *Bubble Dynamics from Holography*, online seminar for the "AstroCoffee" meeting, Institute for Theoretical Physics (ITP) at Goethe University and Frankfurt Institute for Advanced Studies (FIAS) (April 2021).
5. *Bubble Dynamics from Holography*, online seminar for the "HoloTube – Applied Holography" series (March 2021), https://youtu.be/-tnFks08AMA
6. *Real-time Dynamics of Plasma Balls*, online seminar for the "t-, T- and μ-dependence in Quantum Field Theory" series (Apr 2020), https://youtu.be/kp0wLNTJQxo
7. *Holographic Complex CFTs*, Universitat Autonoma de Barcelona, Spain (Oct 2019).
8. *Holographic Dynamics across a Phase Transition*, Ecole Polytechnique, Paris, France (June 2019).
9. *Holographic Dynamics across a Phase Transition*, Saclay, Paris, France (June 2019).
10. *Extreme Holography*, University of Porto, Portugal (July 2018).
11. *Extreme Holography*, University of Barcelona, Spain (May 2018).
12. *Towards the String Dual of a Color Superconductor*, London Triangle Seminar, UK (November 2016).
13. *Towards the String Dual of a Color Superconductor*, University of California, Santa Barbara, USA (September 2015).
14. *Towards the String Dual of a Color Superconductor*, University of California, San Diego, USA (August 2015).
15. *Towards the String Dual of a Color Superconductor*, Stanford Institute for Theoretical Physics, USA (August 2015).
16. *Thoughts (and some calculations) on holographic collisions in confining theories*, MIT, Boston, USA (January 2014).
17. *Thermodynamics and instabilities of a strongly coupled anisotropic plasma*, MIT, Boston, USA (Nov 2011).
18. *Thermodynamics and instabilities of a strongly coupled anisotropic plasma*, Institute of Physics, University of Amsterdam, The Netherlands (Oct 2011).
19. *Quarks, Gluons and Black Holes*, joint seminar by the Universities of Leuven, Brussels and Mons, Leuven, Belgium (Oct 2011).
20. *Universal String Predictions for Heavy Ion Collisions*, Instituto de Fisica Teorica UAM/CSIC, Madrid, Spain (March 2011).
21. *Universal String Predictions for Heavy Ion Collisions*, Perimeter Institute, Waterloo, Ontario, Canada (March 2010).

22. *Two Universal String Predictions for Heavy Ion Collisions*, University of Crete, Greece (Dec 2009).
23. *Two Universal String Predictions for Heavy Ion Collisions*, Trieste, Italy (April 2009).
24. *Two Universal String Predictions for Heavy Ion Collisions*, Niels Bohr Institute, Copenhagen, Denmark (April 2009).
25. *Quarks, Gluons and Black Holes*, University of Barcelona, Spain (Oct 2008).
26. *A Universal String Prediction for Heavy Ion Collisions*, University of California, Santa Barbara, USA (June 2008).
27. *String Theory and RHIC Physics: The Fundamental Story*, National Taiwan University, Taipei, Taiwan (April 2008).
28. *String Theory and RHIC Physics: The Fundamental Story*, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico (March 2008).
29. *String Theory and RHIC Physics: The Fundamental Story*, Stanford University, California, USA (Jan 2008).
30. *String Theory and RHIC Physics: The Fundamental Story*, Berkeley National Laboratory, California, USA (Sep 2007).
31. *String Theory and RHIC Physics: The Fundamental Story*, University of British Columbia, Vancouver, Canada (March 2007).
32. *String Theory and RHIC Physics: The Fundamental Story*, Brandeis University, Boston, USA (Feb 2007).
33. *String Theory and RHIC Physics: The Fundamental Story*, Ecole Polytechnique, Paris, France (Jan 2007).
34. *The Flavourful Gauge/Gravity Correspondence*, University of California, Santa Barbara, USA (June 2006).
35. *An Open String Landscape*, University of Barcelona, Spain (Dec 2005).
36. *Supersymmetric Black Rings and Supertubes*, Institute for Nuclear Theory, University of Washington, Seattle, USA (May 2005).
37. *Supersymmetric Black Rings and Supertubes*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (Feb 2005).
38. *Supersymmetric Black Rings and Supertubes*, University of Wisconsin, Madison, USA (Feb 2005).
39. *Supersymmetric Black Rings and Supertubes*, Michigan Centre for Theoretical Physics, USA (Jan 2005).
40. *Supersymmetric Black Rings and Supertubes*, University of California, Berkeley, USA (Dec 2004).
41. *Supersymmetric Black Rings and Supertubes*, University of Barcelona, Spain (Dec 2004).
42. *Supersymmetric Black Rings and Supertubes*, University of California, San Diego, USA (Nov 2004).

43. *Supersymmetric Black Rings and Supertubes*, Stanford University, California, USA (Nov 2004).
44. *Supersymmetric Black Rings and Supertubes*, Perimeter Institute, Waterloo, Ontario, Canada (Oct 2004).
45. *Supersymmetric Black Rings and Supertubes*, Princeton University, USA (Oct 2004).
46. *Supersymmetric Black Rings and Supertubes*, New York University, USA (Oct 2004).
47. *Supersymmetric Black Rings and Supertubes*, MIT, Boston, USA (Oct 2004).
48. *Supersymmetric Black Rings and Supertubes*, Enrico Fermi Institute, Chicago, USA (Oct 2004).
49. *Supersymmetric Black Rings and Supertubes*, Caltech, USA (Oct 2004).
50. *Towards a Holographic Dual of Large-N QCD*, University of Pennsylvania, USA (Feb 2004).
51. *Towards a Holographic Dual of Large-N QCD*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (Dec 2003).
52. *Towards a Holographic Dual of Large-N QCD*, Humboldt University, Berlin, Germany (Dec 2003).
53. *Towards a Holographic Dual of Large-N QCD*, CERN, Geneva, Switzerland (Dec 2003).
54. *Towards a Holographic Dual of Large-N QCD*, Porto, Portugal (Dec 2003).
55. *Towards a Holographic Dual of Large-N QCD*, University of California, Berkeley, USA (Nov 2003).
56. *Supersymmetry of Rotating Strings in $AdS_5 \times S^5$ and Nearly-BPS Operators*, University of Southern California, USA (Nov 2003).
57. *Towards a Holographic Dual of Large-N QCD*, Ohio State University, USA (Oct 2003).
58. *Towards a Holographic Dual of Large-N QCD*, Institute for Nuclear Theory, University of Washington, Seattle, USA (Oct 2003).
59. *Towards a Holographic Dual of Large-N QCD*, Caltech, California, USA (Oct 2003).
60. *Towards a Holographic Dual of Large-N QCD*, MIT, Boston, USA (Sep 2003).
61. *Towards a Holographic Dual of Large-N QCD*, Brown University, Rhode Island, USA (Sep 2003).
62. *Towards a Holographic Dual of Large-N QCD*, University of Massachusets, Amherst, USA (Sep 2003).
63. *Supersymmetry of Rotating Strings in $AdS_5 \times S^5$ and Nearly-BPS Operators*, Harvard University, Boston, USA (Sep 2003).
64. *AdS/CFT with Defects, and Supertubes*, University of Toronto, Canada (Jan 2003).
65. *Supertubes*, Swansea, UK (Dec 2001).
66. *Supertubes*, Imperial College, London, UK (Dec 2001).
67. *Supertubes*, Durham, UK (Oct 2001).

68. *Supertubes*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (June 2001).

69. *D-branes and Non-commutative Geometry*, King's College, London, UK (Jan 2000).

70. *D-branes and Non-commutative Geometry*, QMW, London, UK (Jan 2000).

71. *D-branes and Non-commutative Geometry*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (Jan 2000).

72. *D-branes and Non-commutative Geometry*, Leuven, Belgium (Dec 1999).

73. *BPS Solutions of a D5-brane Worldvolume in a D3 background from Superalgebras*, University of Barcelona, Spain (Oct 1999).

74. *Finite Energy Dirac-Born-Infeld Monopoles and String Junctions*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (March 1999).

75. *BPS Solutions of a D5-brane Worldvolume in a D3 background from Superalgebras*, Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK (Feb 1999).

Invited Lecture Courses

1. *Gauge/String duality and QCD*, Polish school on String Theory, University of Wroclaw, Wroclaw, Poland, in April 13-15 2012 (3 hours).
2. *AdS/QCD correspondence with emphasis on spectroscopy*, at the XI Hadron Physics Workshop, Maresias, Sao Sebastiao, Sao Paulo, Brasil, in March 21-26 2010 (3 hours).
3. *Applications of AdS/CFT*, at the Perimeter Institute for Theoretical Physics, Waterloo, Ontario, Canada, in March 1-5, 2010 (8 hours).
4. *The gauge/gravity duality and its applications to QCD*, at the 'Institut de Ciències del Cosmos', University of Barcelona, in March 10-April 21 2009 (14 hours).
5. *QCD and String Theory*, at the '21st Spring School on Particles & Fields' at the National Chiao-Tung University, Taiwan, in March 31-April 3 2008 (4 hours).
6. *QCD and String Theory*, at the school on 'Gauge Fields and Strings' at the Isaac Newton Institute in Cambridge, UK, in September 17-27 2007 (4 hours).
7. *QCD and String Theory*, at the RTN Winter School on 'Strings, Supergravity and Gauge Theories' at CERN in January 15-19 2007 (4 hours).
8. *Black Rings and Supertubes*, at the 'Summer School on Strings, Gravity and Cosmology' at Perimeter Institute (Canada) June 20 - July 8, 2005 (3 hours).

Teaching

- 'Frontiers of Theoretical Physics', graduate course of the Master's degree on Astrophysics, Particle Physics and Cosmology, University of Barcelona, uninterruptedly on the years 2013-2021. Topics included "Introduction to supersymmetry", "Wilsonian renormalization group" and "Gauge/string duality".
- Teaching assistant for the 3rd year undergraduate course *Quantum Mechanics* at the Faculty of Physics, University of Barcelona, in the academic years 1998/1999 and 1999/2000.

Conference Organization

1. Member of International Advisory Committee for the conference 'Iberian Strings 2022', March 2022, Gijon, Spain.
2. 'Iberian Strings 2019' at the University of Barcelona (Jan 23-25, 2019), co-organized with Roberto Emparan.
3. ESF workshop "Holography and strongly coupled plasmas in the Veneziano limit" at the University of Barcelona (Nov 10-14, 2014), co-organized with N. Evans, A. Faedo, A. Kundu and J. Tarrio.
4. Member of International Advisory Committee for the conference 'Initial Stages in High-Energy Nuclear Collisions', September 8-14, 2013, Illa da Toxa, Galicia, Spain.
5. '2010 Christmas Meeting' at the University of Barcelona (Dec 20-21, 2010), co-organized with B. Fiol.
6. '2009 Christmas Meeting' at the University of Barcelona (Dec 21-22, 2009), co-organized with B. Fiol.
7. '2nd Informal Meeting on Strings and QCD' at the University of Barcelona (May 5-6, 2009).
8. '2008 Christmas Meeting' at the University of Barcelona (Dec 17-18, 2008), co-organized with B. Fiol.
9. '22nd Pacific Coast Gravity Meeting' at the University of California at Santa Barbara (March 3-4, 2006). Official website: http://www.physics.ucsb.edu/ relativity/22nd-PCGM.html

Grant Reviewing and Refereeing

- Member of the College of Expert Reviewers of the European Science Foundation.
- Grant reviewer (Physics section) for Ministerio de Economia y Competitividad (ES) Plan Nacional grants — akin to UK rolling grants.
- Grant reviewer for Science and Technology Facilities Council (STFC, UK); for the Dutch Research Council (NWO, Netherlands); for the European Science Foundation (ESF); and for the European Science Council (ERC).
- Referee for Physics Letters B, Physical Review D, Physical Review Letters, and Journal of High Energy Physics.

Managerial Activities and Professional Service

- Member of evaluation panel for 'Ramon y Cajal' tenure track positions, March 12-13, 2013, Madrid, Spain.

- Member of the advisory board of the Institute for Cosmos Sciences (University of Barcelona), June 2012–present.
- Guarantor of the Maria de Maeztu Distinction of Excellence project awarded to the Institute for Cosmos Sciences (U of Barcelona), 2015-2019

Examination Panels

PhD theses

Alisa Katanaeva, Feb 10, 2021, U. Barcelona (Spain). Advisors: D. Espriu and S. Afonini.

Jewel Kumar Ghosh, June 19, 2019, U. Sorbonne Paris Cité and U. Paris Diderot (France). Advisors: E. Kiritsis and F. Nitti.

Roberto Carcasses Quevedo, Jul 26, 2018, U. of Porto (Portugal). Advisor: M. Costa.

Xumeu Planells, Nov 6, 2014, U. of Barcelona (Spain). Advisor: D. Espriu.

Javier Tarrio, June 11, 2010, U. of Santiago de Compostela (Spain). Advisor: J. Mas.

Maria Jose Rodriguez, Sep 19, 2008, U. of Barcelona (Spain). Advisor: R. Emparan.

Master theses

Javier Garcia, Sep 20, 2012, U. of Barcelona (Spain). Advisor: J. Latorre

Jose Julian Barragan, Sep 20, 2012, U. of Barcelona (Spain). Advisor: M. Pi

Damian Alvarez, Sep 20, 2012, U. of Barcelona (Spain). Advisor: L. Garrido

Pello Bilbao, Sep 20, 2012, U. of Barcelona (Spain). Advisor: J. Sola

Daniel Alsina, Sep 20, 2012, U. of Barcelona (Spain). Advisor: B. Fiol

Daniel Pablos, Sep 20, 2012, U. of Barcelona (Spain). Advisor: J. Casalderrey-Solana

Emilio Flores, Sep 20, 2012, U. of Barcelona (Spain). Advisor: D. Espriu

Marina Martínez, Feb 8, 2012, U. of Barcelona (Spain). Advisor: R. Emparan

Luis Cort, Feb 8, 2012, U. of Barcelona (Spain). Advisor: B. Fiol.

Toni Gasco, Feb 1, 2011, U of Barcelona (Spain). Advisor: J. M. Pons.

Tommy Sananton, Feb 1, 2011, U. of Barcelona (Spain). Advisor: R. Emparan.

Outreach and Media

- External consultor for Antena 3 Television (Jan 2021).
- *Agujeros Negros*, interview by journalism students from Universitat Autonoma de Barcelona (Dec 2019).
- *Com entendre la teoria de cordes?*, interview by high school student David Casillas Llorens (INS Premia de Mar) for his paper on string theory (Dec 2019).
- *Quaks, Gluones y Agujeros Negros*, public lecture at the Benasque Centre for Science, Benasque, Spain (Jul 2019).
- *The Quark-Gluon Plasma*, radio interview with Josep Cuni on "SER Catalunya Radio", Barcelona, Spain (May 2019).
- *De qué hablamos cuando hablamos de cuántica?*, debate at the "Centre de Cultura Contemporania de Barcelona" (CCCB) with Maciej Lewenstein (April 2019) available at: https://www.cccb.org/es/multimedia/videos/maciej-lewenstein-y-david-mateos/231364
- *String theory may hold answers about quark-gluon plasma*, interview for "Symmetry" magazine, a joint Fermilab/SLAC publication, by Lauren Rugani (May 2011). For article click here or copy this link into your browser: http://www.symmetrymagazine.org/breaking/2011/06/15/string-theory-may-hold-answers-about-quark-gluon-plasma/
- Advisor for high school final year research project entitled *Physics and Black Holes*. Over the course of their final year, students at Palcam high school (Barcelona, Spain) must write a research project on a topic of their choice. I advised two of them, Albert Cantero Font and Marc Caelles Vidal, on their project on black holes. October 2010.
- D. Mateos, "Quarks, Gluons i Forats Negres," ("Quarks, Gluons and Black Holes") Revista de Física, Any 2008 (1er semestre), Vol 4, num 4, pag 26.
- *Cataclismos Cosmicos*, interview for "Redes," a Spanish television science show, by Eduard Punset (March 2005). For summary click here or copy this link into your browser: http://www.ffn.ub.es/∼dmateos/Redes.pdf
- *El paraiso de la fisica del padre de Blackberry*, interview for "Cinco Dias," a Spanish newspaper, by E. Ercoreca (April 2005). For article click here or copy this link into your browser: http://www.ffn.ub.es/∼dmateos/CincoDias.pdf
- *Physicist dances to his own rythm*, interview for "The Record," a Canadian newspaper, by Rose Simone (March 2004), and reprinted for "Innovation Canada," and online magazine (Oct 2005). For article click here or copy this link into your browser: http://www.ffn.ub.es/∼dmateos/TheRecord.pdf