Gábor Lugosi
Curriculum Vitae January 15, 2025

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Academic Positions Held

ICREA & Department of Economics, Pompeu Fabra University
ICREA research professor *2006 – Present*

Department of Economics, Pompeu Fabra University
Visiting assistant, associate, and full professor *1996 – 2006*

Department of Mathematics and Computer Science, Technical University of Budapest, Hungary
Associate professor *1991 – 1996*

Education

PhD in Electrical Engineering *1991*
Hungarian Academy of Sciences
Thesis Title: *"Statistical Pattern Recognition Under Unreliable Circumstances"*

M.S. in Electrical Engineering *1987*
Technical University of Budapest, Hungary
Thesis Title: *"Algorithmic Problems of Isolated Word Recognition."*

Visiting positions

- Visiting researcher at the School of Computer Science, McGill University (October-November, 2024).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2024).
- Visiting researcher at the School of Computer Science, McGill University (September-October, 2023).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2023).
- Gordon Preston Fellow Visiting researcher at the School of Mathematics, Monash University (November-December, 2022).
- Visiting researcher at the School of Computer Science, McGill University (September-October, 2022).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2022).
- Visiting researcher at the School of Computer Science, McGill University (October-November, 2021).
- Visiting researcher at the School of Computer Science, McGill University (September-December, 2019).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2019).
- Inivited participant of a research program on the Foundations of Data Science Fall program at the Simons Institute, Berkeley, CA (Sept, 2018).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2018).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2017).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2016).
- Visiting researcher at IMPA, Rio de Janeiro (May, 2015).
- Visiting professor at Carleton University, Ottawa (February, 2014).
- Visiting professor at the Ecole Normale Superieure, Cachan (February, 2013).
- Visiting professor at the Ecole Normale Superieure, Cachan (February, 2012).
- Visiting professor at the Ecole Normale Superieure, Cachan (February, 2011).

- Visiting professor at the Ecole Normale Superieure, Cachan (February, 2010).
- Visiting professor at the Ecole Normale Superieure, Cachan (February, 2009).
- Visiting professor at the Department of Mathematics, Université Paris 7 (February, 2008).
- Visiting professor at the Department of Mathematics, Université Paris-Sud, Orsay (February, 2007).
- Visiting professor at the School of Computer Science, McGill University, Montreal, Canada (Sept. 2005-Aug.2006).
- Visiting researcher at the Department of Mathematics, Université Paris X, Nanterre (February, 2004).
- Visiting lecturer at ENSAE, Paris (February, 2003).
- Visiting lecturer at "2001, l'Odyssée de la Statistique", Centre Émile Borel, Institut Henri Poincaré, Paris (February-May, 2001)
- Visiting researcher at the Department of Computer Science, Université Paris-Sud, Orsay, (January, March, 2000).
- Visiting researcher at the Department of Mathematics, Université Paris-Sud, Orsay, (January, 1999).
- Visiting researcher at the Coordinated Science Laboratory, University of Illinois at Urbana-Champaign, (April-June, 1995; March-May, 1994; July 1992-May 1993).
- Post-doctoral fellow at Concordia University, Montreal, Canada, (January-March 1992).
- Post-doctoral fellow at the University of Manitoba, Winnipeg, Canada (December 1991-January 1992).
- Visiting researcher at the Technical University of Vienna, Austria (April-June 1991).
- Visiting research assistant at the Catholic University of Leuven, Belgium, (April-May 1990).
- Visiting research assistant at the Northeastern University, Boston (October 1989-January 1990).
- Scholarship awarded by the Hungarian Academy of Sciences; Teaching and Research Assistant at the Technical University of Budapest; Hungary (1987-1990)

Awards and distinctions

- *2024*: ELLIS Fellow.
- *2023*: Elected member of the Institute of Mathematical Statistics Council.
- *2022*: Invited speaker at the International Congress of Mathematicians (ICM 2022).
- *2021*: "*Breiman lecturer*" at NeurIPS.
- *2021*: "*Blackwell lecturer*." Distinction awarded by the Institute of Mathematical Statistics.
- *2017*: Plenary lecturer at FoCM (Foundations of Computational Mathematics).
- *2017–*: *Barcelona Graduate School of Economics research professor.*
- *2013*: Plenary lecturer at the IEEE International Symposium on Information Theory (ISIT).
- *2009*: "*Medallion lecturer*." Distinction awarded by the Institute of Mathematical Statistics.
- *2004*: "*Le Cam lecturer*." Distinction awarded by the French Statistical Society.
- *2000*: "*Distinció de la Generalitat per a la Promoció de la Recerca Universitària*", Distinction for young researchers of the Government of Catalonia.

Funding and research grants received

- *2023 – 2026:* Principal Investigator of Spanish project "Statistical learning for dependent and high-dimensional data", by the Ministerio de Economía y Competitividad, 100.000 euros.
- *2022 – 2025:* Principal investigator of project "Modern challenges in high-dimensional data analysis" by Ayudas Fundación BBVA a Proyectos de Investigación Científica. to Research Groups on Big Data. 149.978 euros.
- *2022 – 2025:* Principal investigator of project "High-dimensional statistics for network analysis"by Huawei Technologies, CSTT Research and Development grant, 1.964.250 euros.
- *2021 – 2024:* Member of research network "Randomness and learning in networks"by the European Comission Horizon 2020 program; total budget 846.400 euros.
- *2019 – 2022:* Principal Investigator of Spanish project "Predicción, inferencia y computación en modelos estructurados de alta dimension" by the Ministerio de Ciencia, Innovación y Universidades, 141.812 euros.
- *2018 – 2020:* Principal investigator of project "High-dimensional problems in structured probabilistic models" by Fundación BBVA to Research Groups on Big Data. 100.000 euros.
- *2018 – 2021:* Google Focused Award for "Algorithms and Learning for AI". 150.000 USD.
- 2017 – 2020: Principal Investigator of Catalan project "Grup d'Estadística i Investigació Operativa" by AGAUR, 18.000 euros
- *2016 – 2019:* Principal Investigator of Spanish project "Estimación de redes latentes" by MEyC, 43.800 euros
- *2015 – 2018:* Co-Principal Investigator (with Roberto Imbuzeiro Oliveira) of Brazilian project "Detection and inference in random networks" by Ministerio da Ciencia, Tecnologia e Inovaçao, Brasil, 80,000 euros.
- 2014 – 2016: Principal Investigator of Catalan project "Grup d'Estadística i Investigació Operativa" by AGAUR, 43.000 euros
- *2013 – 2015:* Principal Investigator of Spanish project "Predicción e inferencia en modelos estructurados de dimensión alta" by MEyC, 34.000 euros
- *2009 – 2013:* Principal Investigator of Catalan project "Grup d'Estadística i Investigació Operativa" by AGAUR, 47.840 euros
- *2009 – 2012:* Principal Investigator of Spanish project "Métodos estadísticos de aprendizaje, métodos de aprendizaje en estadística" by MCyT, 49.000 euros
- *2007 – 2012:* head of Barcelona node of the European network "PASCAL2: Pattern Analysis, Statistical Modelling and Computational Learning 2" by the European Community, total budget 6.000.000 euros
- *2005 – 2008:* Principal Investigator of Catalan project "Grup d'Estadística i Investigació Operativa" by AGAUR, 42.200 euros
- *2006 – 2009:* Principal Investigator of Spanish project "Métodos probabilísticos en aprendizaje, juegos y finanzas" by MCyT, 35.690,00 euros
- *2004 – 2007:* head of Barcelona node of the European network "PASCAL: Pattern Analysis, Statistical Modelling and Computational Learning" by the European Community, total budget 5.440.000 euros
- *2003 – 2006:* Principal Investigator of Spanish project "Estimación no paramétrica con aplicaciones en procesos financieros" by MCyT, 117.680,00 euros
- *2002 – 2003:* Member of Spanish network "Red Temática en Reconocimiento de Formas y sus Aplicaciones" by MCyT, 30000 euros
- *2001 – 2002:* Co-principal investigator of Spanish-Hungarian cooperation project "Procesamiento de señales no-paramétricas" by MAE, 6000 euros

- *2001 – 2002:* Co-principal investigator of Spanish-French cooperation project "Técnicas de penalización en la teoría estadística de aprendizaje y cuestiones de complejidad estructural en computación cuántica" by MCYT, 8.293,97 euros.
- *2000 – 2003:* Principal Investagator of Spanish project "Estimación no paramétrica de funcionales" by MCyT, 21.936,94 euros.
- *1997 – 2000:* team member of Spanish project "Modelización multivariante de datos longitudinales" by DGES (PI Albert Satorra), 30.050,61 euros
- *1998 – 2000:* Site manager of "NeuroCOLT2", a European research network on computational learning theory. 3200 euros for Barcelona site.
- *1994 – 1996:* Co-principal investigator of a three-year collaboration on "Data Compression and Pattern Recognition" within the framework of "US-Eastern Europe Cooperative Science Program" jointly sponsored by the National Science Foundation of the USA and the Hungarian Academy of Sciences
- *1994 – 1996:* Principal investigator of a three-year research program on "Universal Source Coding and Statistical Pattern Classification" granted by the "National Scientific Research Fund" of Hungary.

Scholarly academic activities

Editorial boards:

- *2024 – :* Associate editor of *Electronic Journal of Probability* and *Electronic Communications of Probability*
- *2017 – :* Founding co-editor of *Mathematical Statistics and Learning.*
- *2016 – 2021:* Associate editor of *Annals of Applied Probability.*
- *2015 – 2024:* Associate editor of *Probability Theory and Related Fields.*
- *2005 – :* Action editor of *Journal of Machine Learning Research.*
- *2006 – 2020:* Member of the editorial board of *Machine Learning Journal.*
- *2001 – 2025:* Associate editor of *Test.*
- *2003 – :* Associate editor of *ESAIM:Probability and Statistics.*
- *2010 – 2015 :* Associate editor of *Scandinavian Journal of Statistics.*
- *1999 – 2002 :* Associate editor of the *IEEE Transactions on Information Theory*, for Nonparametric Estimation, Classification, and Neural Networks.
- *2002 – 2011 :* Associate editor of *Statistics and Decisions.*
- *2013 – :* Member of the Advisory Board of *Springer Lecture Notes of Mathematics* series.
- *2007 – :* Member of the editorial board of *Foundations and Trends in Machine Learning.*
- *2006 – :* Member of editorial committee of the *Buttletí de la Societat Catalana de Matemátiques.*
- *2006 – :* Member of the advisory board of *International Journal of Statistics and Management Systems.*
- *2006 :* Guest editor of *Machine Learning Journal*, Special issue on COLT 2006, published in December, 2007 (with Hans Simon and Avrim Blum).
- *2007 :* Guest editor of *Constructive Approximation*, Special issue on Mathematical Learning Theory. (with Ronald DeVore).
- *2010 :* Guest editor of *Theoretical Computer Science*, Special issue on Algorithmic Learning Theory. (with Sandra Zilles).

Grant and prize committees:

- *2024:* Member of the committee for the Ramon Llull prize in Discrete Mathematics.
- *2022 – 2024:* Member of the committee for the José Luis Rubio de Francia Prize.

- *2019:* Panel member for ERC Synergy Grants.
- *2015 – 2016 :* Member of the committee for the Ferran Sunyer i Balaguer prize.
- *2014 – 2015, 2016 – 2017 :* Panel member for ERC Consolidator Grants of Mathematics,
- *2011 – 2012 :* Panel member for ERC Starting Grants of Mathematics.
- *2005 – 2018 :* Member of the prize committee for "Le Cam lecturer", award of French Statistical Society.
- *2002 :* Member of the "Comisión de Evaluación de Proyectos del Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica, Área de Matemáticas".
- *2001 :* Member of the Spanish national committee for awarding Ramon y Cajal scholarships in mathematics, September.
- *2001 :* Member of the Committee of best paper prize of the IEEE Information Theory Society.

Program committees, conference organization:

- Organizer of the semester research program "Probability and Statistics of Discrete Structures" at the Simons Laufer Mathematical Sciences Institute (MSRI), Berkeley, Spring, 2025.
- Co-organizer of the month-long research program "Randomness and Learning on Networks" at IMPA, Rio de Janeiro, Brazil, August 2024,
- Co-organizer of semester research program „Computational Complexity of Statistical Inference" at the Simons institute for the Theory of Computing, Berkeley, Fall 2021.
- Co-organizer of meeting on "Mathematical Statistics and Learning" at the Banff International Research Station, Banff, Canada, November 29–December 3, 2021.
- Co-organizer of "Probability and combinatorics: Fourteenth Annual Workshop", Belairs Research Institute, McGill University, Barbados, April 2019.
- Member of the steering committee of ALT conferences, 2018–
- Co-organizer of a month-long thematic activity on Mathematics of Machine Learning at the Centre de Recherches Mathématiques (CRM) in Montréal, Canada, April-May, 2018.
- Co-organizer of "Probability and combinatorics: Thirteenth Annual Workshop", Belairs Research Institute, McGill University, Barbados, April 2018.
- Member of the program committee of ALT'18: 29th International Conference on Algorithmic Learning Theory, 2018.
- Member of the program committee of ALT'17: 28th International Conference on Algorithmic Learning Theory, 2017.
- Co-organizer of "Random Discrete Structures and Beyond", a monthly program of the Barcelona Graduate School of Mathematics, May-June, 2017.
- Co-organizer of "Probability and combinatorics: Twelfth Annual Workshop", Belairs Research Institute, McGill University, Barbados, March 2017.
- Member of the program committee of COLT'17: 30th Annual Conference on Learning Theory, 2017.
- Co-organizer of "Theoretical Foundations for Learning from Easy Data", a workshop at the Lorentz Center, Leiden, Netherlands, November 2016.
- Co-organizer of "Conference on probability and statistics in high dimensions. A scientific tribute to Evarist Giné" at Centre de Recerca Matemàtica, Barcelona, June 2016.
- Member of the program committee of AofA'16: 27th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Krakow, Poland, 2016.
- Member of the program committee of JMDA'16: Discrete Mathematics Days Barcelona, 2016.
- Member of the program committee of COLT'16: 29th Annual Conference on Learning Theory, New York City, 2016.

- Member of the Scientific Programme Committee (SPC) for the European Meeting of Statisticians, Helsinki, 2017.
- Co-organizer of workshop (together with M. Hein and L. Rosasco) on "Mathematical and Computational Foundations of Learning Theory" at Schloss Dagstuhl, Germany, September, 2015.
- Co-organizer of workshop on "Advances of statistical methodology related to big data", Castro Urdiales, Spain, June, 2015.
- Co-organizer of "Probability, combinatorics, and geometry: Tenth Annual Workshop", Belairs Research Institute, McGill University, Barbados, April 2015.
- Co-organizer of 3-month long research program on the "Mathematics of Machine Learning" at Centre de Recerca Matemàtica, Barcelona, April-June, 2014.
- Member of the program committee of AofA'14: 25th International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms, Paris, France, 2014.
- Member of the program committee of COLT'14: 27th Annual Conference on Learning Theory, Barcelona, 2014.
- Co-organizer of Workshop on "Probability, combinatorics, and geometry", Belairs Research Institute, McGill University, Barbados, April 2014.
- Member of the program committee of ALT'13: 24th International Conference on Algorithmic Learning Theory, Singapore, Republic of Singapore, October 6–9, 2013.
- Member of the program committee of COLT'13: 26th Annual Conference on Learning Theory, Princeton, NJ, 2013.
- Co-organizer of meeting on "Models of sparse graphs and network algorithms" at the Banff International Research Station, Banff, Canada, February 6–10, 2012.
- Member of the program committee of COLT'12: 25th Annual Conference on Learning Theory, Edinburgh, Scotland, 2012.
- Organizer of Mini-workshop (together with L. Györfi, I. Steinwart, and S. van de Geer) on Mathematics of Machine Learning at MFO, Oberwolfach, Germany, August, 2011.
- Organizer of workshop (together with M. Hein, L. Rosasco, and S. Smale) on Mathematical and Computational Foundations of Learning Theory at Schloss Dagstuhl, Germany, July, 2011.
- Workshop organizer (together with N. Cesa-Bianchi) on Learning Theory at the conference Foundations of Computational Mathematics, Budapest, Hungary, 2011.
- Member of the program committee of ALT'11: 21st International Conference on Algorithmic Learning Theory, Espoo, Finland, 2011.
- Member of the program committee of COLT'11: 24th Annual Conference on Learning Theory, Budapest, Hungary, 2011.
- Member of the program committee of ALT'10: 21st International Conference on Algorithmic Learning Theory, Canberra, Australia, 2010.
- Member of the program committee of COLT'10: 23nd Annual Conference on Learning Theory, Haifa, Israel, 2010.
- Session organizer on "Interface between probability and statistics" at XI CLAPEM, Naiguatá, Venezuela, 2009.
- Co-organizer of meeting on "Advances in Stochastic Inequalities and their Applications" at the Banff International Research Station, Banff, Canada, June 7–12, 2009.
- Co-chairman of the Program Committee of ALT'09: the 20th International Conference on Algorithmic Learning Theory, Porto, 2009.
- Member of the program committee of COLT'09: 22nd Annual Conference on Learning Theory, Montral, Canada, 2009.

- Member of the program committee of ISIT 2009 (International Symposium on Information Theory).
- Member of the scientific committee of ISNI 2008: International Seminar on Nonparametric Inference, Vigo, Spain, 2008.
- Member of the program committee of ALT'08: Algorithmic Learning Theory, Budapest, Hungary, 2008.
- Workshop organizer (together with N. Cesa-Bianchi) on Learning Theory at the conference Foundations of Computational Mathematics, Hong Kong, China, 2008.
- Session organizer on "Nonparametric learning" at the conference on Probability and Statistics in Science and Technology, Porto, Portugal, 2007.
- Member of the program committee of CCIA 2007: Desè Congrés Internacional de l'Associació Catalana d'Intel.ligència Artificial, Andorra;
- Member of the program committee of COLT'07: Twentienth Annual Conference on Learning Theory, San Diego, California, 2007;
- Co-chairman of the Program Committee of COLT'06: the 19th Annual Conference on Learning Theory, Pittsburgh, 2006.
- Session organizer on "Applications of Concentration Inequalities" at the 2006 International Workshop on Applied Probability, Department of Statistics, University of Connecticut, May 15 - 18, 2006.
- Member of the program committee and special session organizer of the IEEE Information Theory Workshop, Punta del Este, Uruguay, March 13-17, 2006.
- Co-organizer of Oberwolfach workshop "Statistical and probabilistic methods of model selection," October 16th - October 22nd, 2005.
- Member of the program committee of the International seminar on nonparametric inference (ISNI 2005) A Coruña, Spain, July 13-15, 2005.
- Main coordinator of the meeting Mathematical Foundations of Learning Theory organized by the Centre de Recerca Matemàtica, Barcelona, 2004.
- Member of the program committee of COLT'97: Tenth Annual Conference on Computational Learning Theory, Nashville, Tennessee, 1997;
- Member of the program committee of COLT'02: Fifteenth Annual Conference on Computational Learning Theory, Sidney, Australia;
- Member of the program committee of COLT'05: Eighteenth Annual Conference on Learning Theory, Bertinoro, Italy;
- Member of the program committee of EUROCOLT'99: 4th European Conference on Computational Learning Theory, Dortmund, Germany, 1999;
- Member of the program committee of COMB'2001: Euroconference on Combinatorics, Graph Theory, and Applications, Barcelona, 2001.
- Member of the program committee of ALT'99: Tenth International Workshop on Algorithmic Learning Theory, Tokyo, Japan, 1999;
- Member of the program committee of ALT'04: The 15th International Conference on Algorithmic Learning Theory Padova University, Padova, Italy, 2004.
- Member of the program committee of SNRFAI'99: 8th Spanish National Symposium on Pattern Recognition and Image Analysis, Bilbao, 1999;
- Member of the program committee of IAPR international workshop on Statistical Pattern Recognition (SPR 2000), Alicante, 2000;
- *Member* of the steering committee of COLT conferences, 2001–2004.
- *Elected member* of the steering committe of EuroCOLT conferences, 1997. *Chair* of the committee 1999-2001.

- Organized an invited session at the 25th European Meeting of Statisticians in Oslo, Norway, 2005.
- Co-organized an invited session on Classification at the IEEE Information Theory Workshop on Detection, Estimation, Classification, and Imaging in Santa Fe, New Mexico, 1999.

Other academic activities:

- *2021 – :* Member of the Scientific Advisory Board of the Foundations of Data Science Institute (FODSI).
- *2016 – :* Member of the Academic Committee of the Barcelona Graduate School of Economics.
- *2016 – :* Member of the Governing Board of the Barcelona Graduate School of Mathematics.
- *2015 – :* Member of the Scientific Advisory Board of the Publishing House of the European Mathematical Society.
- *2013 – 2015 :* Member of the Scientific Committee of the Barcelona Graduate School of Mathematics.
- *2011 – :* Member of the Scientific Advisory Board of the Centre de Recerca Matemàtica of Catalonia.
- *2011 – 2018 :* Member of the Scientific Committee of the Fondation Mathématique Jacques Hadamard
- *2013 – 2016 :* Vice director of the Departament d'Economia i Empresa, Universitat Pompeu Fabra.
- *2000 – 2005 :* Vice dean for academic affairs, Facultat d'Economia i Empresa, Universitat Pompeu Fabra

Graduate courses, summer schools:

- Lectures on the hidden clique problem. Mathematical foundations of network models and their applications – Research School. Chennai Mathematical Institute, 2024.
- Concentration inequalities. Annual Graduate School in Mathematical Aspects of Data Science, Darwin, Australia, 2024.
- Random Structures and Combinatorial Statistics. Bocconi Summer School in Advanced Statistics and Probability, 2022.
- Introduction to statistical learning theory. Barcelona Graduate School of Mathematics, 2019.
- A course on "Elements of combinatorial statistics", presented at the 47th Probability Summer School, Saint-Flour, France, 2017.
- A short course on Concentration inequalities presented at the Instituto Nacional de Matemática Pura e Aplicada, Rio de Janeiro, September, 2014
- A short course on "Probabilistic tools for discrete mathematics" presented at Carleton University, Ottawa, Canada, February, 2014.
- Random structures and the probabilistic method. Barcelona Graduate School of Mathematics, 2013.
- A short course on Concentration inequalities in learning theory presented at"Information Technology and Systems–2013, Conference for Young Scientists and Engineers", Kaliningrad, Russia, September, 2013.
- A short course on Learning Theory at the INIT/AERFAI Summer School on Machine Learning, Benicassim, June, 2013.
- A course on Concentration inequalities; Spring School on Structural Inference and Statistics, Bad Belzig, Germany, March 2013
- Short course on Prediction, Learning, and Games, presented at the graduate program of Ecole Normale Superieure, Cachan, February, 2013.

- Short course on Concentration inequalities, presented at the Machine Learning Summer School, La Palma, April, 2012.
- Short course on Prediction, Learning, and Games, presented at the graduate program of Ecole Normale Superieure, Cachan, February, 2012.
- Short course on Prediction, Learning, and Games, presented at the graduate program of Ecole Normale Superieure, Cachan, February, 2011.
- Short course on Prediction, Learning, and Games, presented at the graduate program of Ecole Normale Superieure, Cachan, February, 2010.
- Short course on Prediction, Learning, and Games, presented at the graduate program of Ecole Normale Superieure, Cachan, February, 2009.
- Short course on Prediction, Learning, and Games, presented at the doctorate program of ENSAE, Paris, February, 2008.
- Short course on Prediction, Learning, and Games, jointly presented with N. Cesa-Bianchi, at the 8th Max-Planck Advanced Course on the Foundations of Computer Science (ADFOCS), Saarbrücken, Germany, September, 2007.
- Short course on Prediction, Learning, and Games, jointly presented with N. Cesa-Bianchi, Ecole Normale Superiore Paris, February, 2007.
- Short course on Statistical Learning Theory presented at the IX Escuela de Probabilidad y Estadística, CIMAT, Guanajuato, Mexico, January 22-26, 2007.
- Short course on Concentration Inequalities presented at the Workshop de Combinatória e Concentracao de Medida IMPA, Rio de Janeiro, February 23-25, 2005.
- Short course on Concentration Inequalities presented at the Winter School - Probabilistic Methods in High Dimension Phenomena, Toulouse, January 10-14, 2005.
- A course on Statistical Learning Theory presented in the Ph.D. program of Statistics at the Universidad de Valladolid, April 2004.
- Short course on Statistical Learning Theory presented in the "Programa de doctorado interuniversitario: estadística e investigación operativa", Universidade da Coruña, April, 2004.
- Short course on Statistical Learning Theory presented at the Université Paris X, Nanterre, February, 2003.
- Short course on Concentration Inequalities presented at the Workshop on Combinatorics, Probability, and Algorithms, CRM, Montreal, May 2003.
- Short course on Statistical Learning Theory presented in the "Programa de doctorado interuniversitario: estadística e investigación operativa", Universidad de Vigo, April, 2003.
- Short course on Statistical Learning Theory presented at the doctorate program of ENSAE, Paris, March-April, 2003.
- Short course on Concentration Inequalities presented at the *Machine Learning Summer School 2003*, Australian National University, Canberra, Australia, February 2–14, 2003.
- Short course on Statistical Learning Theory presented in the "Programa de doctorado interuniversitario: estadística e investigación operativa", Universidad de Vigo, April, 2002.
- Short course on Statistical Learning Theory presented at the summer course Principles of Nonparametric Learning held at the CISM International Centre for Mechanical Sciences, Udine, Italy, July 9-13, 2001.
- Short course on Statistical Learning Theory presented in the "Programa de doctorado interuniversitario: estadística e investigación operativa", Universidade da Coruña, June, 2001.
- Course on Prediction of Individual Sequences presented at "2001, l'Odyssée de la Statistique", Centre Émile Borel, Institut Henri Poincaré, Paris, February–May, 2001.

- Short course on Statistical Learning Theory presented at the 23rd Finnish Summer School on Probability Theory, Lahti, Finland, June 5–9, 2000.
- Short course on Statistical Learning Theory presented at the Garchy Seminar on Mathematical Statistics and Applications: Statistical Learning, Mathematical Genetic and Pollution Data, August 27–September 1, 2000.

Invited talks at universities and research institutes:

- University of California Los Angeles, 2024.
- Universidade Federal de Rio de Janeiro, Brazil, 2024.
- Pontifícia Universidade Católica do Rio de Janeiro, 2024.
- ESSEC Business School, Paris, 2024.
- Lorne Campbell Colloquium, Department of Mathematics and Statistics, Queen's University Kingston, 2023.
- Vienna Probability Seminar, University of Vienna, 2023.
- Colóquio Interinstitucional Modelos Estocásticos e Aplicações (COLMEA); IMPA, Rio de Janeiro, 2023.
- University of Toronto, 2023
- Mohamed bin Zayed University of Artificial Intelligence, 2023
- University of Copenhagen, 2023
- University of Zagreb, 2023
- Monash University, Melbourne; (twice), 2022
- University of Ottawa; (twice), 2022, 2016;
- McGill University, Montreal; (nine times), 2024, 2023, 2022, 2019, 2018, 2013, 2005, 2005, 2001;
- Duke University, Decision Sciences Group, 2022;
- Nokia Bell Labs "Big Thought Time Talk", 2022;
- CRM Montréal, Colloque des sciences mathématiques du Québec (CSMQ) , 2021;
- University of Bristol, Probability seminar, 2021;
- University of Southern California, Department of Mathematics, 2021;
- Quantitative Methods seminar, Krannert School of Management of Purdue University, 2021;
- Séminaire de Statistique CREST-CMAP, 2021;
- Cambridge University, Econometrics seminar, 2021;
- RandNET research network seminar, 2021.
- Frankfurt, Mainz and Darmstadt joint probability seminar, 2020
- Barcelona Graduate School of Mathematics and Basque Center for Applied Mathematics joint coloquium, 2020
- MaD+ joint NYU/ETH seminar series, 2020
- Modern Artificial Intelligence special seminar, NYU, 2020
- ElementAI, Montreal, 2019
- University Quebec a Montreal, 2019
- University of Alberta, Edmonton, 2019
- Fundacão Getulio Vargas, Department of Applied Mathematics, Rio de Janeiro, 2019
- Université Paris-Diderot, 2019;
- Institute Camille Jordan, Lyon; 2019.

- University of California at Berkeley; (twice) 2018
- Universidad Carlos III; (four times), 1999, 2009, 2018, 2024;
- Princeton University (four times), 2017, 2012, 1999, 1995;
- IMPA, Rio de Janeiro, Brazil, 2017, 2019
- Universidade Federal de Rio de Janeiro, Brazil, 2017
- Eötvös Lóránd University, Budapest, 2017;
- TU Eindhoven, 2016;
- Oxford University, 2016;
- MIT, 2015; 2020
- Universidade Federal Fluminense, Niterói, Brazil, 2015
- Paris-Saclay Center for Data Science, 2015;
- Microsoft Research, Redmond, 2014;
- Georgia Tech, Atlanta (twice), 2014, 2006;
- Queen's University, Kingston; (six times), 2023, 2014, 2013, 2003, 2001; 1999;
- Max Planck Institut für Mathematik und Naturwissenschaften, Leipzig, 2013;
- Université de Toulouse, 2013
- ETH, Zurich (three times), 2016, 2012 and 2005;
- Institue Henri Poincaré, Paris (four times), 2012, 2009, 2007, 2007;
- École Normale Supériore, Cachan, 2011;
- Instituto de Matemáticas, Valladolid, 2011;
- ENSAE, Paris, 2011;
- Technical University of Budapest; (twice), 2011, 2004;
- Cambridge University, Statistical Laboratory, 2010;
- Université de Bordeaux I, 2010;
- Technion, Haifa, 2010;
- Université de Montréal, 2009;
- Université Paris 6; (twice), 2009, 2004;
- École Normale Supérieure, Paris (three times), 2008, 2000, 1999;
- University of Zurich, 2007;
- Seminaire Hypathie, Marseille, 2007;
- INRIA, Lille, 2007;
- Universidad de Barcelona (four times), 1999, 2001, 2007, 2023;
- University of Pennsylvania, 2006;
- Carleton University, Ottawa, 2005;
- BCN Jocs, Barcelona game theory seminar, 2005;
- Yale University, New Heaven, 2005;
- Universidad de Santiago de Compostela, 2004;
- Université Paris-Sud; (three times), 2003, 2000, 1999;
- CRM, Université de Montréal, 2003;
- Mathematical Research Institute, Budapest, 2002;
- Universitat Politecnica Catalunya (eight times), 2011, 2009, 2008, 2002, 2002, 2000, 1999, 1997;

- Chinese University of Hong Kong, 2000;
- *Stochastics Meeting Lunteren*, Lunteren, Holland, 2000;
- Universitat Autonoma de Barcelona (three times), 2022, 2000, 1997;
- Army Research Laboratory, Adelphi, MD (Distinguished lecturer), 1999;
- University of Maryland, College Park, 1999;
- Universidade da Coruña, 1998;
- Universidad del Pais Vasco, Bilbao, 1998;
- University of California, San Diego, 1997;
- University of North Carolina at Chapel Hill, 1995,
- University of Illinois at Champaign-Urbana (three times), 1993, 1994, 1995;
- University of Manitoba, 1992;
- Concordia University, 1992;
- University of Hawaii, 1992;
- IBM Thomas Watson Research Institute (twice), 1989;
- Boston University, 1989;
- Northeastern University, 1989.

Ph.D. students:

- Richar Coll, UPC, 2024 –
- Maxim Fedotov, UPF, 2023 –
- Georgios Karelas, UPF, 2023 –
- Sofiya Burova, UPC, 2023 –
- Francisco Calvillo, Sorbonne Université, 2023 –
- Simon Briend, Université Paris Saclay, 2022–2024. Thesis title: "Inference of the past of random structures and other random problems."
- Roger Garriga, UPF, 2019–2024. Thesis title: "Prediction of mental health crises based on electronic health records: Probabilistic and machine learning models for clinical applications."
- Julia Olkhovskaya, UPF, 2017–2022. Thesis title: "Large-scale online learning under partial feedback."
- Vasiliki Velona, UPC, 2017–2021. Thesis title: "A study on structure recovery and the broadcasting problem. "
- Alan Andreson da Silva Pereira, IMPA, 2016–2018. Thesis title: "Topics in discrete probability: analysis of the past and of the future. "
- Guðundur Stefan Guðmundsson, UPF, 2015–2018. Thesis title: "Essays in Network Modelling."
- Emilien Joly, Université Paris-Sud, Orsay. 2012–2015. Thesis title: "Robust estimation for heavy-tailed distributions."
- Gilles Stoltz, Universite Paris-Sud, Orsay. May, 2005. Thesis title: "Information incomplète et regret interne en prédiction de suites individuelles."
- Márta Pintér, Technical University of Budapest, 2002. Co-supervised with L. Györfi.
- András Antos, Technical University of Budapest, 2000. Co-supervised with L. Györfi.

Post-doctoral supervision:

- Rui-Ray Zhang, 2023 – ;
- Deborah Sulem, 2022 – 2024;
- Ciara Pike-Burke 2019 – 2020;
- Sébastien Bubeck (Post-doctoral fellow at the Centre de Recerca Matemàtica, 2010-11).
- Nicolas Vayatis (Marie-Curie postoctoral fellow, 2000-2002);

Publications

Books

1. S. Boucheron, G. Lugosi, and P. Massart. *Concentration Inequalities: A Nonasymptotic Theory of Independence.* Oxford University Press, 2013.
2. R. Gavaldà, G. Lugosi, T. Zeugmann, and S. Zilles (Eds.) *Algorithmic Learning Theory. Proceedings of the 20th International Conference, ALT 2009.* Springer, New York, 2009.
3. N. Cesa-Bianchi and G. Lugosi. *Prediction, Learning, and Games.* Cambridge University Press, 2006.
4. G. Lugosi and Hans Ulrich Simon (Eds.) *Learning Theory. Proceedings of the 19th Annual Conference on Learning Theory, COLT 2006.* Springer, New York, 2006.
5. L. Devroye and G. Lugosi. *Combinatorial Methods in Density Estimation.* Springer-Verlag, New York, 2000.
6. L. Devroye, L. Györfi, and G. Lugosi. *A Probabilistic Theory of Pattern Recognition.* Springer-Verlag, New York, 1996.
7. T. Linder and G. Lugosi. *Introduction to Information Theory.* Technical University of Budapest, in Hungarian, 1990.

Articles in refereed journals

1. S. Briend, C. Giraud, G. Lugosi, and D. Sulem. Estimating the history of a random recursive tree. *Bernoulli*, to appear, 2024.
2. C. Atamanchuk, L. Devroye, and G. Lugosi. A note on estimating the dimension from a random geometric graph. *Electronic Journal of Statistics*, Vol. 18, No. 2, 5659-5678, 2024.
3. N. Broutin, N. Kamčev, and G. Lugosi. Increasing paths in random temporal graphs. *Annals of Applied Probability*, Vol. 34, No. 6, 5498-5521, 2024.
4. G. Lugosi and S. Mendelson. Multivariate mean estimation with direction-dependent accuracy. *Journal of the European Mathematical Society*, 26(6):2211–2247, 2024.
5. N. Broutin, L. Devroye, G. Lugosi, and R. Imbuzeiro Oliveira. Subtractive random forests. *ALEA, Latin American Journal of Probability and Mathematical Statistics*, Volume XXI, pages 575–591, 2024.
6. R. Garriga, V. Gómez, and G. Lugosi. Individualized post-crisis monitoring of psychiatric patients via Hidden Markov models. *Frontiers in Digital Health*, Volume 6, 2024.
7. K. Böröczky, G. Lugosi, and M. Reitzner. Facets of high-dimensional Gaussian polytopes. *Journal of Geometric Analysis*, Volume 34, article number 69, 2024.
8. G. Lugosi, M. Markakis, and G. Neu. On the hardness of inventory management with censored demand data. *INFORMS Journal on Optimization*, Volume 6(2), 63–83, 2024.
9. G. Lugosi, C. Pike-Burke, and P.-A. Savalle. Bandit problems with fidelity rewards. *Journal of Machine Learning Research*, 328:1-44, 2023.
10. S. Briend, F. Calvillo, and G. Lugosi. Archaeology of random recursive dags and Cooper-Frieze random networks. *Combinatorics, Probability and Computing*, 32:6, 859-873, 2023.
11. A. Khaleghi and G. Lugosi. Inferring the mixing properties of a stationary ergodic process from a single path. *IEEE Transactions on Information Theory*, 69:6, 4014-4026, 2023.
12. L. Devroye, S. Lattanzi, G. Lugosi, and N. Zhivotovskiy. On mean estimation for heteroscedastic random variables. *Annales de l'Institut Henri Poincaré*, 59:1, 1-20, 2023.
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15. G. Lugosi, J. Truszkowski, V. Velona, and P. Zwiernik. Learning partial correlation graphs and graphical models by covariance queries. *Journal of Machine Learning Research*, 22(203):1–41, 2021.

16. G. Lugosi and A. Mehrabian. Multiplayer bandits without observing collision information. *Mathematics of Operations Research*, 47(2):1247-1265, 2021.

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23. G. Lugosi and S. Mendelson. Regularization, sparse recovery, and median-of-means tournaments. *Bernoulli*, Vol. 25, No. 3, 2075-2106, 2019.

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26. G. Lugosi and A. S. Pereira. Finding the seed of uniform attachment trees. *Electronic Journal of Probability*, Vol. 24, 1-15, 2019.

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40. L. Addario-Berry, S. Bhamidi, S. Bubeck, L. Devroye, G. Lugosi, and R. Imbuzeiro Oliveira. Exceptional rotations of random graphs: a VC theory. *Journal of Machine Learning Research*, 16:1893–1922, 2015.

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43. N. Broutin, L. Devroye, and G. Lugosi. Connectivity of sparse Bluetooth networks. *Electronic Communications in Probability*, 20(48):1–10, 2015.

44. E. Arias-Castro, S. Bubeck, and G. Lugosi. Detecting positive correlations in a multivariate sample. *Bernoulli*, 21:209–241, 2015.

45. R.M. Castro, G. Lugosi, P.-A. Savalle. Detection of correlations with adaptive sensing. *IEEE Transactions on Information Theory*, 60:7913–7927, 2014.

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55. G. Lugosi. Comment on: ℓ_1-penalization for mixture regression models. *Test*, 19:259-263, 2010.

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63. G. Lugosi, S. Mannor, and G. Stoltz. Strategies for prediction under imperfect monitoring. *Mathematics of Operations Research*, 33:513–528, 2008.

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66. L. Devroye and G. Lugosi. Local tail bounds for functions of independent random variables. *The Annals of Probability*, 36:143–159, 2008.

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68. A. György, T. Linder, G. Lugosi, and Gy. Ottucsák. The on-line shortest path problem under partial monitoring. *Journal of Machine Learning Research*, 8:2369–2403, 2007.

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71. F. Germano and G. Lugosi, Existence of sparsely supported correlated equilibria. *Economic Theory*, 32:575–578, 2007.

72. G. Lugosi. Prédiction randomisée de suites individuelles. *Journal de la Société Française de Statistique*, 147:5–37, 2006.

73. S. Clémençon, G. Lugosi, and N. Vayatis. Some comments on "Local Rademacher complexities and oracle inequalities in risk minimization" by Vladimir Koltchinskii. *The Annals of Statistics*, 2006, 34:2672–2676, 2006.

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80. G. Stoltz and G. Lugosi. Internal regret in on-line portfolio selection. *Machine Learning*, 59:125-159, 2005.

81. A. György, T. Linder, and G. Lugosi. Efficient Algorithms and Minimax Bounds for Zero-Delay Lossy Source Coding. *IEEE Transactions on Signal Processing*, 52:2337- 2347, 2004.

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84. G. Lugosi and N. Vayatis. On the Bayes-risk consistency of regularized boosting methods. *Annals of Statistics*, 32:30–55, 2004.

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Other papers

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1. G. Lugosi. "Review of 'Maximum Penalized Likelihood Estimation. Volume I: Density Estimation' by P. P. B. Eggermont and V. N. LaRiccia", *SIAM Review*, 45:127–164, 2003.

Selected conference papers and presentations

1. G. Lugosi. Network archaeology: an overview of mathematical models. Ninth Pacific Rim Conference in Mathematics, Darwin, Australia 2024. (plenary talk)
2. G. Lugosi. Increasing paths in random temporal graphs. Young European Probabilists Workshop, Eindhoven, The Netherlands, 2024.
3. G. Lugosi. Network archaeology: models and some recent results. 2023 IMS International Conference on Statistics and Data Science (ICSDS), Lisbon, Portugal, 2023. (plenary talk)
4. G. Lugosi. Learning large graphical models. ELLIS Workshop on Artificial Intelligence, Bocconi University, 2022. (keynote talk)
5. G. Lugosi. Mean estimation in high dimension. International Congress of Mathematicians (ICM 2022). (invited talk)
6. G. Lugosi. Problems in network archaeology: root finding and broadcasting. International Symposium on Nonparametric Statistics, ISNPS, 2022. (special invited talk)

7. G. Lugosi. Root finding and broadcasting in recursive trees and dags. One-Day Meeting in Combinatorics, Mathematical Institute, University of Oxford, June 2022. (invited talk)
8. G. Lugosi and G. Neu. Generalization bounds via convex analysis. COLT 2022, in *Proceedings of Machine Learning Research*, 178:3524-3546, 2022.
9. G. Lugosi. Network archaeology: root finding and broadcasting. Congreso Bienal de la Real Sociedad Matemática Española, Ciudad Real, 2022. (plenary talk)
10. G. Lugosi. Do we know how to estimate the mean? **Breiman lecture lecture.** NeurIPS 2021. (plenary talk)
11. G. Lugosi. Estimating the mean of a random vector. **Blackwell lecture.** 10th World Congress in Probability and Statistics, Seoul, Korea, 2021. (plenary talk)
12. G. Lugosi. Learning the structure of graphical models by covariance queries. London Symposium on Information Theory (online meeting), 2021. (invited talk)
13. G. Lugosi. Tree Archeology: Root Finding and Broadcasting. IEEE ITW 2020 Information Theory Workshop, Riva del Garda, Italy April (online meeting) 2021. (plenary talk)
14. G. Lugosi. Root finding and broadcasting in random recursive trees. Advances In Applied Probability, International Centre for Theoretical Sciences, Bangalore, India (online meeting) 2020. (invited talk)
15. G. Lugosi. Noise sensitivity of the top eigenvector of a Wigner matrix. Northeast Probability Seminar, New York, 2019. (invited talk)
16. G. Lugosi. Learning graphical models by covariance queries. Statistics Conference in Honor of Aad van der Vaart's 60th Birthday, Leiden, 2019. (invited talk)
17. G. Lugosi. Many questions and a few answers in network archeology. 55th Dutch Mathematical Congress, Veldhoven, 2019. (Plenary lecture.)
18. J. Olkhovskaya, G. Lugosi. Online Influence Maximization with Local Observations. Proceedings of ALT, 2019, in *Proceedings of Machine Learning Research*, 98:557-580, 2019.
19. N. Cesa-Bianchi, Claudio Gentile, G. Lugosi, and G. Neu. Boltzmann exploration done right. NIPS, 2017.
20. G. Lugosi. Mean estimation: median-of-means tournaments. FoCM 2017, Foundations of Computational Mathematics, Barcelona, 2017. (Plenary lecture.)
21. Y. Seldin and G. Lugosi. An Improved Parametrization and Analysis of the EXP3++ Algorithm for Stochastic and Adversarial Bandits. Proceedings of COLT, 2017.
22. T. Liu, G. Lugosi, G. Neu and D. Tao. Algorithmic stability and hypothesis complexity. Proceedings of the 34th International Conference on Machine Learning (ICML), 2017.
23. Y. Seldin and G. Lugosi. A Lower Bound for Multi-Armed Bandits with Expert Advice. European Workshop on Reinforcement Learning, Barcelona, December 2016.
24. G. Lugosi. Median-of-means tournaments for regression. Theoretical Foundations for Learning from Easy Data, Lorentz Center, Leiden, The Netherlands, November 2016.
25. G. Lugosi. How to estimate the mean of a random variable? 27th International Conference on Algorithmic Learning Theory, Bari, Italy, October 2016. (invited plenary tutorial lecture)
26. G. Lugosi. Finding Adam in randomly growing trees. Junior Conference on Data Science and Engineering. Paris, France, September 2016. (keynote lecture)
27. G. Lugosi. How to estimate the mean of a random variable? Nexus of Information and Computation Theories, Inference Problems Theme. Paris, France, March 2016. (invited talk)
28. G. Lugosi. A high-dimensional random graph process. Cargèse fall school on random graphs. Corsica, Sept., 2015. (invited talk)
29. G. Lugosi. Online learning with structured experts. Greek Stochastics, Chania, Crete, July, 2015. (two invited plenary talks)

30. G. Lugosi. Connectivity properties of random bluetooth networks. Computational Geometry Week, Eindhoven, The Netherlands, June 2015. (invited talk)
31. G. Lugosi. Finding Adam in randomly growing trees. Advances of statistical methodology related to big data", Castro Urdiales, Spain, June, 2015. (plenary talk)
32. G. Lugosi. Looking for Adam in a tree. Probability Theory and Combinatorial Optimization The Fuqua School of Business, Duke University, March 14-15, 2015. (invited talk)
33. G. Lugosi. Empirical risk minimization for heavy-tailed losses. Probability Theory and Statistics in High and Infinite Dimensions: Empirical Process Theory and Beyond, Cambridge, June 23-25, 2014. (invited talk)
34. M. Alamgir, G. Lugosi, and U. von Luxburg. Density-preserving quantization with application to graph downsampling. COLT 2014, Barcelona.
35. G. Lugosi. Explosive percolation in random Bluetooth networks. Nice Workshop on random graphs, Nice, May 14-15, 2014. (invited talk)
36. G. Lugosi. Detection of Correlations and High-Dimensional Random Geometric Graphs. Geometric Aspects of High-dimensional Inference, SAMSI, Triangle Park, North Carolina, March 31-April 2, 2014 (invited talk)
37. G. Lugosi. Explosive percolation in random irrigation graphs. Workshop on Probability and Graphs, Eurandom, Eindhoven, The Netherlands. Jan. 6-10, 2014. (invited plenary talk)
38. G. Lugosi. Empirical risk minimization for heavy-tailed losses. Workshop on Nonparametric Curve Smoothing, Montreal, Canada, Dec. 16-17, 2013. (invited plenary talk)
39. G. Lugosi. Detection of correlations and random geometric graphs. IEEE Information Theory Workshop, Sevilla, Spain, Sept. 9–13, 2013. (invited plenary talk)
40. G. Lugosi. Concentration inequalities and the entropy method. IEEE International Symposium on Information Theory (ISIT), Istanbul, Turkey, July 8-12, 2013. (invited plenary talk)
41. G. Lugosi. Prediction and online combinatorial optimization. 2nd Workshop on Industry & Practices for Forecasting (WIPFOR), Paris, France, June 5–7, 2013. (invited plenary talk)
42. G. Lugosi. Concentration inequalities and the entropy method. 24th International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2013), Menorca, Spain, May 27-31, 2013. (invited plenary talk)
43. N. Cesa-Bianchi, P. Gaillard, G. Lugosi, and G. Stoltz. Mirror descent meets fixed share (and feels no regret). NIPS 2012.
44. G. Lugosi. Sobre la conectividad de algunos grafos aleatorios geométricos. Congreso de la Real Sociedad Matemática Española, Santiago de Compostela, January 21–25, 2012. (invited talk)
45. G. Lugosi. Connectivity of random irrigation graphs Workshop on Networks: Processes and Causality, Cala Galdana, Menorca, Sept. 3–6, 2012 (invited talk)
46. G. Lugosi. Detection of correlations in high dimension. Fifteenth International Conference on Artificial Intelligewnce and Statistics (AISTATS 2012), La Palma, Canary Islands, April 21–23, 2012. (invited plenary talk)
47. J.-Y. Audibert, S. Bubeck, and G. Lugosi. Minimax policies for combinatorial prediction games. 24nd Annual Conference on Learning Theory (COLT 2011), Budapest, Hungary, July 10–12, 2011.
48. G. Lugosi. Random geometric graphs in high dimensions. 5èmes Journées Statistiques du Sud, Nice, France, June 14–16, 2011. (invited talk)
49. G. Lugosi. On the clique number of high-dimensional random geometric graphs. Workshop on Random Graphs, Université Lille 1, France, April 4-6, 2011. (invited talk)
50. G. Lugosi. Sharp threshold for percolation on expanders. Discrete Harmonic Analysis workshop, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, March 28-April 1, 2011. (invited talk)

51. G. Lugosi. Grafos aleatorios: tema y variaciones Jornada Erdős, Departamento de Matemáticas y Esdadística, Universidad Politécnica de Catalunya, March 4, 2011. (invited talk)
52. G. Lugosi. Adversarial bandit problems: the power of randomization. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Barcelona, September 20-24, 2010. (tutorial talk)
53. G. Lugosi. The clique number of high-dimensional random geometric graphs. 34th Conference on Stochastic Processes and Their Applications, Osaka, Japan, September 5–11, 2010. (invited talk)
54. G. Lugosi. Combinatorial testing problems. Prague Stochastics 2010, Aug 30–Sept. 4, 2010. (invited talk)
55. G. Lugosi. Combinatorial testing problems. ICM Satellite Conference on Probability and Stochastic Processes, Bangalore, India, August, 2010. (invited talk)
56. G. Lugosi. Combinatorial testing problems. XI CLAPEM, Naiguatá, Venezuela, November 1–6, 2009. (invited talk)
57. G. Lugosi. The Longest Minimum-weight Path in a Complete Graph. Workshop onTechniques and Challenges from Statistical Physics, CRM, Bellaterra, October 14–16, 2009. (invited talk)
58. Sharp threshold for percolation on expanders, Conference on Probabilistic Techniques in Computer Science, CRM, Bellaterra, September 14–18, 2009. (invited talk)
59. Combinatorial Problems in Randomized Sequential Prediction. **Medallion lecture.** Joint Statistical Meetings, Whashington DC, August 1–6, 2009.
60. Performance bounds and algorithms in randomized sequential prediction. European Meeting of Statisticians, Toulouse, France, June 20-24, 2009. (special invited lecture)
61. G. Lugosi. Strategies for prediction under imperfect monitoring. Workshop on On-line Learning with Limited Feedback, Montreal, Canada, June 18, 2009. (invited talk)
62. N. Cesa-Bianchi and G. Lugosi. Combinatorial Bandits. 22nd Annual Conference on Learning Theory (COLT 2009), Montreal, Canada, June 19–21, 2009.
63. G. Lugosi, O. Papaspiliopoulos, and G. Stoltz. Online Multi-task Learning with Hard Constraints. 22nd Annual Conference on Learning Theory (COLT 2009), Montreal, Canada, June 19–21, 2009.
64. G. Lugosi. The Longest Minimum-weight Path in a Complete Graph. Workshop Combinatorics, Randomization, Algorithms and Probability, Montreal, Canada, May 4-8, 2009. (invited talk)
65. G. Lugosi. Randomized sequential prediction: performance and algorithms. ISNI 2008: International Seminar on Nonparametric Inference, Vigo, Spain, November 7-9, 2008. (invited talk)
66. G. Lugosi. Consistency of random forests and related classifiers. Workshop On Current Trends And Challenges In Model Selection And Related Areas, Vienna, Austria, July 24–26, 2008. (invited talk)
67. G. Lugosi. Concentration inequalities. 21st Annual Conference on Learning Theory (COLT'08), Helsinki, Finland, 9-12 July, 2008. (keynote talk)
68. A. György, G. Lugosi, Gy. Ottucsák. On-line sequential bin packing. Proceedings of the 21st Annual Conference on Learning Theory (COLT'08), Helsinki, Finland, 9-12 July, 2008.
69. G. Lugosi. Desigualdades de concentración. Onzena Trobada Matemàtica de la Societat Catalana de Matemàtiques, Barcelona, June 6, 2008. (invited talk)
70. G. Lugosi. The resistance of random trees. 2008 International Conference on the Analysis of Algorithms (AofA'08), Maresias, Brasil, April, 2008. (invited talk)
71. G. Lugosi. Sequential prediction under partial monitoring. Desè Congrés Internacional de l'Associació Catalana d'Intel.ligència Artificial, Andorra, October 25-26, 2007. (plenary talk)
72. G. Lugosi. Predicción secuencial bajo información incompleta. XXX Congreso Nacional de Estadística e Investigación Operativa, Valladolid, September 25–28, 2007. (plenary talk)
73. G. Lugosi. Local tail bounds for functions of independent random variables. Tools in High Dimensional Phenomena, Jaca, September 17-21, 2007. (invited talk)

74. G. Lugosi. The performance of clustering in Hilbert spaces. Probability and Statistics in Science and Technology, Porto, Portugal, August 30-September 1, 2007.

75. G. Lugosi. On the consistency of random forests for classification. 56th Session of the ISI, August 22-29, Lisboa, 2007. (invited talk)

76. G. Lugosi. Sequential prediction under imperfect monitoring. 7th Annual INFORMS Revenue Management and Pricing Section Conference, Barcelona, June 28-29, 2007. (invited talk)

77. G. Lugosi. Local tail bounds for functions of independent random variables. Conférence internationale en probabilités et statistique, Journées ESAIM P&S, Toulouse, June 14-15, 2007. (invited talk)

78. G. Lugosi. Consistency of random forests for classification. Premières Journées Statistiques du Sud, Nice, April 11-14, 2007. (invited talk)

79. G. Lugosi. Ranking and empirical minimization of U-statistics. Journées de Statistiques, Rennes 2006 Estimation non-paramétrique, Oct. 26-27, 2006. (invited talk)

80. S. Clemencon, G. Lugosi, and N. Vayatis. Ranking and Empirical Minimization of U-Statistics. 2006 International Workshop on Applied Probability, Department of Statistics, University of Connecticut, May 15 - 18, 2006. (invited talk)

81. G. Lugosi. Concentration and moment inequalities for functions of independent random variables. Colloquium talk at the Carleton Applied Probability Day, Ottawa, Canada, Sept. 17, 2005.

82. G. Lugosi. Empirical risk minimization for ranking problems ISNI 2005, International Seminar on Nonparametric Inference, A Coruña, July 13–15, 2005. (invited talk)

83. G. Lugosi. Efficient algorithms for on-line prediction 2005 International Conference on the Analysis of Algorithms (AofA'05), Barcelona, June 6–10, 2005. (invited keynote talk)

84. G. Lugosi. Algoritmos eficientes para la codificación de fuentes sin retraso Jornada Científica de Telecomunicaciones y Matemáticas de la Real Sociedad de Matamáticas, Universitat Politècnica de Catalunya, 8 de junio de 2005. (invited talk)

85. G. Lugosi. The rate of convergence of regularized boosting classifiers. *Notions of complexity: information-theoretic, computational, and statistical approaches*, EURANDOM, Eindhoven, October 7–9, 2004. (invited talk)

86. G. Lugosi. On the rate of convergence of regularized boosting classifiers. *6th World Congress of the Bernoulli Society*, Barcelona, July 26–31, 2004. (invited talk)

87. G. Lugosi. Sequential prediction under limited feedback. PASCAL Workshop on Learning Theoretic and Bayesian Inductive Principles, London, 19–21 July 2004. (invited talk)

88. G. Lugosi. Moment inequalities for functions of independent random variables. First Joint Canada-France meeting of the mathematical sciences. Toulouse, July 12–15, 2004. (plenary talk)

89. N. Cesa-Bianchi, G. Lugosi, and Gilles Stoltz. Minimizing regret with label efficient prediction. *17th Annual Conference on Learning Theory*, pages 77–92. Springer, 2004.

90. G. Lugosi. Prediction, learning, and games. XXXVIèmes Journées de Statistique, Montpellier, May 24–28, 2004. Le Cam lecture.

91. G. Lugosi. Moment inequalities for functions of independent random variables. IX CLAPEM, Congreso Latinoamericano de Probabilidad y Estadística Matemática, Punta del Este, Uruguay, March 22-26, 2004. (invited talk)

92. G. Lugosi. On the rate of convergence of regularized boosting classifiers. 11th ANNUAL MEETING OF THE Belgian Statistical Society, Centre Nature de Borzée, La Roche-en-Ardenne, October, 2003. (invited talk)

93. G. Stoltz and G. Lugosi. Internal regret in on-line portfolio selection Proceedings of the *16th Annual Conference on Learning Theory*, pages 403–417. Springer, 2003.

94. G. Lugosi. Applications of concentration inequalities in learning theory Workshop on Asymptotic Geometric Analysis and Machine Learning, UniversitÃ© de Marne-la-Vallée, March 24–26, 2003. (invited talk)

95. G. Lugosi. Complexity regularization via localized random penalties Workshop on Statistical Learning in Classification and Model Selection, EURANDOM, Eindhoven, The Netherlands, January 15-18, 2003. (invited talk)

96. G. Lugosi. The performance of boosting in classification *LEARNING'02*, Leganés, October 23–25, 2002. (invited talk)

97. G. Lugosi and N. Vayatis. Bayes-risk consistency of boosting *Foundations of Computational Mathematics, FoCM '02 Conference*, Minneapolis, August 5–14, 2002. (invited talk)

98. G. Lugosi. Some new concentration inequalities based on the entropy method *Stochastic Inequalities and their Applications. A EuroConference*, CRM, Bellaterra, June 17–21, 2002. (invited talk)

99. G. Lugosi. Bayes-risk consistency of boosting methods in classification *Statistical Modelling and Inference3 for Complex Data Structures*, Louvain-la-Neuve, Belgium, May 21–23, 2002. (invited talk)

100. G. Lugosi Model selection via localized random penalties *XXXIVèmes Journées de Statistique*, Bruxelles, 13-17 may 2002. (invited talk)

101. G. Lugosi. Bayes-risk consistency of boosting methods in classification *SMOOTHING 2002, A workshop of nonparametric smoothing in complex statistical models*, Ascona, Switzerland, April 28-May 3, 2002. (invited talk)

102. G. Lugosi. Desigualdades de concentración *Congreso de la Real Sociedad Española de Matemáticas*, Tenerife, Jan. 26–Feb.1, 2002. (invited plenary talk)

103. N. Cesa-Bianchi and G. Lugosi. Potential-based algorithms in on-line prediction and game theory Proceedings of the *14th Annual Conference on Computational Learning Theory*, pages 48–64. Springer, 2001.

104. B. Kégl, T. Linder, and G. Lugosi. Data-dependent margin-based generalization bounds for classification Proceedings of the *14th Annual Conference on Computational Learning Theory*, pages 368–384. Springer, 2001.

105. G. Lugosi. Model selection based on estimated penalties. *Joint AMS-HKMS Conference*, Hong Kong, 2000. (invited talk)

106. G. Lugosi. Two lectures on prediction of individual sequences. *Stochastics Meeting Lunteren*, Lunteren, Holland, 2000. (two invited talks)

107. G. Lugosi. Concentration and error estimation. *Bernoulli-RIKEN BSI 2000 Symposium on Neural Networks and Learning*, Tokyo, Japan, 2000. (invited talk)

108. G. Lugosi. Desigualdades de concentración. *II Jornades de Matemàtica Discreta i Algorísmica*, p. 65, Palma de Mallorca, 2000. (invited talk)

109. P. Bartlett, S. Boucheron, and G. Lugosi. Model selection and error estimation. *Thirteenth Annual Conference on Computational Learning Theory*, ACM Press, pp.286–297, 2000.

110. N. Cesa-Bianchi and G. Lugosi. Worst-case bounds for the redundancy of sequential lossless codes and for the logarithmic loss of predictors. *Proceedings of the 2000 IEEE International Symposium on Information Theory*, Sorrento, Italy, p.98, 2000.

111. T. Linder and G. Lugosi. A zero-delay sequential quantizer for individual sequences. *Proceedings of the 2000 IEEE International Symposium on Information Theory*, Sorrento, Italy, p.125, 2000.

112. G. Lugosi. A zero-delay sequential scheme for lossy coding of individual sequences *Neurocolt Workshop on Applications of Learning Theory*, Bellaterra, 2000. (self-invited talk)

113. G. Lugosi. Model Selection Based on Estimated Complexity. *5th World Congress of the Bernoulli Society*, Guanajuato, Mexico, 2000. (invited talk)

114. N. Cesa-Bianchi and G. Lugosi. Minimax regret bounds under log loss for general classes of experts. *12th Conference on Computational Learning Theory*, pages 12-18. ACM Press, 1999.

115. G. Lugosi. Aspectos geométricos de la clasificación estadística. in the proceedings of *VIII Encuentros de Geometría Computacional*, Castelló, pp.103–108, 1999. (invited talk)

116. G. Lugosi. A new concentration inequality. *The Fifth International Seminar on the Mathematical Analysis of Algorithms*, CRM, Bellaterra, 1999. (invited talk)

117. S. Boucheron, G. Lugosi, P. Massart. The random VC dimension and VC entropy are concdentrated around their mean. *Proceedings of the 1999 IEEE Information Theory Workshop on Detection, Estimation, Classification, and Imaging*, Santa Fe, N.M., p.38, 1999.

118. N. Cesa-Bianchi, G. Lugosi. On prediction of individual sequences relative to a set of experts. *Proceedings of the 1998 IEEE International Symposium on Information Theory*, Cambridge, Massachusetts, p.334, 1998.

119. N. Cesa-Bianchi, G. Lugosi. On optimal prediction of a binary sequence relative to a set of experts. *Proceedings of the Winter 1998 Information Theory Workshop*, San Diego, California, p.74, 1998.

120. G. Lugosi, L. Devroye. Universal smoothing in density estimation. *Symposium on Nonparametric Functional Estimation*, Montreal, Canada, 1997. (invited talk)

121. P. Bartlett, T. Linder, and G. Lugosi. The minimax distortion redundancy in empirical quantizer design. Proceedings of the *IEEE International Symposium on Information Theory*, Ulm, Germany, p.511, 1997.

122. T. Linder, G. Lugosi, and K. Zeger. Empirical quantizer design in the presence of source noise or channel noise. Proceedings of the *IEEE International Symposium on Information Theory*, Ulm, Germany, p.514, 1997.

123. P. Bartlett and T. Linder and G. Lugosi. A minimax lower bounds for empirical quantizer design. in: *Computational Learning Theory: Proceedings of the Third European Conference, EuroCOLT'97*, *Lecture Notes in Artificial Intelligence 1208*, Springer, Berlin, editor Shai Ben-David, pp.210–222, 1997.

124. S. Kulkarni, G. Lugosi. Minimax lower bounds for the two-armed bandit problem, Dagstuhl Seminar on *Theory and Practice of Machine Learning*, 1997.

125. G. Lugosi, A. Nobel. Adaptive Model Selection Using Empirical Complexities. *4th World Congress of the Bernoulli Society*, Vienna, Austria, August 26–31. 1996. (invited talk)

126. A. Antos, G. Lugosi. Strong minimax lower bounds for learning. In: *Proceedings of the Nineth Annual ACM Conference on Computational Learning Theory*, Association for Computing Machinery, New York, pp.303–309, 1996.

127. G. Lugosi, M. Pintér. A data-dependent skeleton estimate for learning. In: *Proceedings of the Nineth Annual ACM Conference on Computational Learning Theory*, Association for Computing Machinery, New York, pp.51–56, 1996.

128. T. Linder, G. Lugosi, and K. Zeger. Empirical quantizer design in the presence of source noise and channel noise. *Proceedings of Data Compression Conference*, IEEE Computer Society Press, Los Alamitos, California, 1996.

129. G. Lugosi, A. Nobel. Complexity regularization using data-dependent penalties, *IEEE International Symposium on Information Theory*, Whsitler, Canada, 1995.

130. G. Lugosi, K. Zeger. Concept learning using complexity regularization *IEEE International Symposium on Information Theory*, Whsitler, Canada, 1995.

131. A. Krzyżak, T. Linder, G. Lugosi. Nonparametric classification and estimation using radial basis function nets and empirical risk minimization, *IEEE International Symposium on Information Theory*, Whsitler, Canada, 1995.

132. G. Lugosi, K. Zeger. Concept learning using complexity regularization *IEEE Information Theory Workshop*, Rydzyna, Poland, 1995.

133. G. Lugosi, K. Zeger. Nonparametric estimation using neural networks. *IEEE International Symposium on Information Theory*, Trondheim, Norway, 1994.

134. A. Nobel, G. Lugosi. Histogram classification using vector quantization, *IEEE International Symposium on Information Theory*, Trondheim, Norway, 1994.

135. T. Linder, G. Lugosi, K. Zeger. Fixed rate universal lossy source coding for memoryless sources and rates of convergence, *IEEE International Symposium on Information Theory*, Trondheim, Norway, 1994.

136. T. Linder, G. Lugosi, K. Zeger. Rates of convergence in the source coding theorem, in empirical quantizer design, and in universal lossy source coding, *IEEE International Symposium on Information Theory*, Trondheim, Norway, 1994.

137. A. Nobel, G. Lugosi. Histogram density estimation using data-dependent partitions, *Proceedings of CISS*, Princeton, NJ, 1994.

138. T. Linder, G. Lugosi, and A. Krzyzak. Nonparametric Classification using Radial Basis Function Nets and Empirical Risk Minimization. *12th International Conference, on Pattern Recognition*, Jerusalem, 1994.

139. T. Linder, G. Lugosi, K. Zeger. Universality and rates of convergence in lossy source coding. In: *Proceedings of Data Compression Conference*, Snowbird, Utah 1993.

140. G. Lugosi. Empirical risk minimization for neural network estimates, *ORSA-TIMS 36th Joint National Meeting*, Phoenix, Arizona, 1993. (invited talk)

141. A. Faragó, G. Lugosi. Strong universal consistency of neural network classifiers. *IEEE International Symposium on Information Theory*, San Antonio, Texas, 1993.

142. G. Lugosi, M. Pawlak. On the posterior probability estimate of the error rate of nonparametric classification rules. *IEEE International Symposium on Information Theory*, San Antonio, Texas, 1993.

143. G. Lugosi. Imperfectly supervised training in statistical pattern recognition. *IEEE International Symposium on Information Theory*, Budapest, Hungary, 1991.

144. T. Linder, G. Lugosi. Classification with a low complexity nearest neighbor algorithm", *IEEE International Symposium on Information Theory*, San Diego, CA, 1990.

145. G. Lugosi, A. Faragó. A parameter estimation algorithm for speech recognition to maximize state optimized joint likelihood"*IEEE International Symposium on Information Theory, San Diego, CA, 1990.*

146. A. Faragó, G. Lugosi. An optimal algorithm for a speech recognition and segmentation model. In: Proceedings of the VDE International Conference on Digital Speech Processing *Bad Nauheim, Germany, 1988.*

147. K. Vicsi, T. Linder, G. Lugosi. Search for fast dynamic time warping algorithms", 11th International Conference of Acoustics*, Tallin, USSR, 1987.*