

ARE WE EQUAL YET? WOMEN MATHEMATICIANS GIVE THEIR POINT OF VIEW

Pilar Bayer Isant, Celia García Pareja, Camilla Hollanti, Kristin Lauter, Elisa Lorenzo García, Flavia Remo

Panel discussion organized by: Laia Amorós and Alex Jung, Department of Computer Science, Aalto University (Finland)

When?

January 28th 2021, 17h UCT

Where?

Zoom: <https://aalto.zoom.us/j/64428671042> – Meeting ID: 644 2867 1042

Pilar Bayer Isant



Pilar Bayer Isant is currently Professor Emerita of Algebra at the University of Barcelona. In 1967, she obtained the title of professor of piano at the Barcelona Municipal Conservatory of Music, and in 1968, she received her degree in mathematics from the University of Barcelona, where she obtained her PhD in 1975, and became Full Professor of Algebra in 1982. She is a tenured member of the Spanish Royal Academy of Exact, Physical and Natural Sciences and is a Member Emerita of the Institute for Catalan Studies, in the Section of Sciences and Technology. As a mathematician, she has devoted her research career to the field of number theory, having worked from 1977 to 1980 at the Universität Regensburg (Germany), in the Number Theory Seminar conducted by Jürgen Neukirch. She has authored numerous scientific publications and several books, on zeta functions, diophantine equations, automorphic forms, elliptic curves, modular curves and Shimura curves. She has directed many research projects and supervised fifteen doctoral theses. As a “mathematician who plays the piano”, she has performed on many occasions at different academic music events. Recently, she presented a programme featuring a selection of compositions by women composers from the 18th to the 21st centuries.

Camilla Hollanti



Camilla Hollanti received the M.Sc. and Ph.D. degrees from the University of Turku, Finland, in 2003 and 2009, respectively, both in pure mathematics. Her research interests lie within applications of algebraic number theory to wireless communications and physical layer security, as well as in combinatorial and coding theoretic methods related to distributed storage systems and private information retrieval. Since 2011, she has been with the Department of Mathematics and Systems Analysis at Aalto University, Finland, where she currently works as a professor and vice head, and leads a research group in Algebra, Number Theory, and Applications. Hollanti is currently an editor of the AIMS Journal on Advances in Mathematics of Communications, SIAM Journal on Applied Algebra and Geometry, and IEEE Transactions on Information Theory. She is a recipient of several Academy of Finland grants, and in 2014 she received the World Cultural Council Special Recognition Award for young researchers. In 2017, the Finnish Academy of Science and Letters awarded her the Väisälä Prize in Mathematics. For 2020-2022, Hollanti is serving as a member of the Board of Governors of the IEEE Information Theory Society, and is one of the General Chairs of IEEE ISIT 2022. On her free time, she is devoted to hiking, yoga, space, Donald Duck, and cats.

Celia García Pareja is a mathematician driven by the idea of developing new mathematical tools to improve other fields of research and have impact on real-world problems. Celia holds a degree in Mathematics (licenciatura) by the University of Barcelona and a MSc. in Statistics and Operations Research by UPC Barcelona Tech. She obtained her PhD in Biostatistics from Karolinska Institutet with the thesis “Topics on mathematical statistics for medical applications: summary measures and exact simulation of diffusions” in September 2019. She is currently an affiliated researcher to the Division of Mathematical Statistics, Department of Mathematics, KTH Royal Institute of Technology, in Stockholm, Sweden, where she spent two years as a visiting PhD student and worked as a lecturer in statistics after her graduation. Celia’s research interests are at the interface of simulation and inference on stochastic processes, stochastic modelling, computational mathematics and ultimately, most of what is labeled as applied probability or mathematical statistics. One perennial motivation throughout her work, however, is the focus on applications to the biosciences.

Celia García Pareja



Kristin Lauter



Kristin Lauter is a mathematician and cryptographer whose research areas are number theory, algebraic geometry, and applications to cryptography. She is particularly known for her work on homomorphic encryption, elliptic curve cryptography, and for introducing supersingular isogeny graphs as a hard problem into cryptography. She is a Principal Researcher and Partner Research Manager of the Cryptography and Privacy Group at Microsoft Research in Redmond, Washington. Lauter received her BA, MS, and PhD degrees in mathematics from the University of Chicago, in 1990, 1991, and 1996, respectively. Prior to joining Microsoft, she held positions as a Visiting Scholar at Max Planck Institut für Mathematik in Bonn, Germany (1997), T.H. Hildebrandt Research Assistant Professor at the University of Michigan (1996-1999), and a Visiting Researcher at Institut de Mathématiques Luminy in France (1999). She served as President of the Association for Women in Mathematics from 2015–2017. She is a co-founder of the Women in Numbers Network, a research collaboration community for women in number theory. She has published more than 100 papers and holds more than 50 patents. In 2020, Lauter was elected to the 2020 Class of Fellows of the Society for Industrial and Applied Mathematics (SIAM) and the 2020 Class of Fellows of the American Association for the Advancement of Science (AAAS).

Elisa Lorenzo García



Flavia Remo is still pursuing her PhD in Mathematics at Friedrich-Schiller-University Jena, in Germany, funded by the Marie-Curie Skłodowska under the Innovative Training Network (ITN). As she waits for her defense, she is currently working as a teaching assistant and at the same time undertaking research in the group of Dynamical systems and Ergodic Theory headed by Professor Jäger Tobias at the University of Jena. Her research is focused on Critical Transitions in Complex Systems (CRITICS), particularly focusing on the Fold bifurcation as a paradigmatic example of a critical transition in forced one dimensional systems in population dynamics, as well as finding early warning signals for this pattern. Before she moved to Germany for her PhD, she was involved in a government program (SESEMAT) in her country, that involves training secondary school science teachers on how to teach science practically to improve the performance and quality of teaching in science. In her free time, she enjoys hiking, sports, networking, learning new languages and meeting new people.

Flavia Remo



Elisa Lorenzo García got her PhD at the Universitat Politècnica de Catalunya (Spain) in 2014. After a postdoc at Universiteit Leiden (The Netherlands) she got a permanent position as maître de conférences at the Université de Rennes 1 (France). Currently, after taking a leave of absence at Rennes, she is working at Université de Neuchâtel (Switzerland) as maître assistante. Her research is on arithmetic and algebraic geometry, she is specially interested in understanding and characterizing the reduction type of low genus curves and low dimension abelian varieties. She has been the president of the commission of Women and Mathematics of the RSME (Spanish Mathematical Society) from 2017 to 2019. She is a member of the EGMO (European Girl’s Math Olympiad) Advisory Board since 2018. She is also a member of CIMPA since 2020 and has taught courses in several schools in South America, Africa and Asia. She loves travelling, mountains, nature in general, having a glass of wine with good company, and of course, maths.