

CERTIFICATE



We hereby certify that Alexei Abaevich Mailybaev, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Spontaneous Stochasticity*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



CERTIFICATE



We hereby certify that Ana Patrícia Carvalho Gonçalves, Instituto Superior Tecnico - Universidade de Lisboa, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Overview about hydrodynamics, fluctuations, and universality of interacting particle systems*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Artur Avila Cordeiro De Melo, Instituto de Matematica Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Renormalization, Fractal Geometry, and the Newhouse Phenomenon*

A handwritten signature in blue ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Carlos Kenig, University Of Chicago (UNIV. CHICAGO), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Soliton resolution and channels of energy for nonlinear wave equations*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Hubert Marie Lacoïn, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Mixing time and cutoff for one dimensional systems*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Hugo Duminil-Copin, University of Geneva, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Critical Phenomena Through the Lens of the Ising Model*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Joao Candido Portinari, Projeto Portinari Puc-Rio, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *War and Peace, by Portinari: A Brazilian Masterpiece for the UN*

A handwritten signature in blue ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Khadim Mbacke War, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Proof of the Verjovsky Conjecture*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Lucas Coelho Ambrozio, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Zoll-like manifolds in minimal submanifold theory*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Luciana Luna Anna Lomonaco, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *The Modular Mandelbrot set*

A handwritten signature in blue ink that reads 'Marcelo Viana'.

Marcelo Viana
Organizing Committee



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We hereby certify that Paulo Najberg Orenstein, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Split conformal prediction and its extensions to non-exchangeable data*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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We hereby certify that Persi Warren Diaconis, Stanford University, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Shuffling Cards and Random Matrix Theory*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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We hereby certify that Reimundo Heluani, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Factorization*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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We hereby certify that Robert David Morris, Instituto de Matemática Pura e Aplicada (IMPA), attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *Universality for Monotone Cellular Automata*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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We hereby certify that Smirnov, Stanislav, Univ. Genevre, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *2D percolation revisited*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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We hereby certify that Ulrike Tillmann, Isaac Newton Institute for Mathematical Sciences, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *A renaissance for the algebraic topology of manifolds*

A handwritten signature in black ink that reads 'Marcelo Viana'.

Marcelo Viana
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We hereby certify that Vinicius Gripp Barros Ramos, Université de Nantes, attended the Conference IMPA 70 Years, held at IMPA, Rio de Janeiro Brazil, from October 17 – 21, 2022, presenting the talk *The Mahler conjecture, billiards and systolic inequalities*

A handwritten signature in black ink that reads 'Marcelo Viana'.

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