

# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, ***Ailin Ruiz de Zarate Fabregas***, **Universidade Federal do Paraná**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**A higher order Internal Wave Model**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Alexandre Stauffer, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Multi-particle diffusion limited aggregation**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Alexei Mailybaev**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work:  
**“Spontaneously stochastic solutions from singular initial data”.**

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Apala Majumdar, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“The Mathematics of Liquid Crystals: Merging Theory, Simulations and Experiments”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Augusto Quadros Teixeira**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Sharpness of the phase transition for continuum percolation in  $\mathbb{R}^2$** ”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA–Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Carlos Antonio Galeano Rios**, **University of Bath**, participated in the IMPA–Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“A Model for the Impact of a Superhydrophobic Sphere onto a Bath and Application to Bouncing Droplets”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Cassio Machiaveli Oishi**, **Universidade Estadual Paulista - Presidente Prudente**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**A numerical study of the Oldroyd-B fluid in the natural stress formulation**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Chris Guiver, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Simple adaptive feedback control for positive state systems with potential applications to pest management”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee





# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Claudio Landim**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**A reaction-diffusion model**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Clodoaldo Grotta Ragazzo**, Instituto de Matemática e Estatística, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Viscoelastic Tides: Models for Use in Celestial Mechanics**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing  
impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Daniel Ahlberg**, **IMPA - Pós-Doutorando**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Particle flows and geodesics in a random metric space”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, ***Daniel Gregorio Alfaro Vigo***, **Universidade Federal do Rio de Janeiro**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work:  
**“Time-reversal of waves in random media”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing  
impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **David Andrade**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work:  
**“Water waves over irregular bottoms”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Francisco de Melo Viríssimo**, **University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Multilayered flows in the shallow-water limit: formulation and stability”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Hubert Lacoïn**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Cutoff phenomenon for the asymmetric simple exclusion process and the biased card shuffling”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Jonathan Evans, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Complex fluids with memory**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**





# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Jorge P. Zubelli**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**A Non-intrusive Stratified Resampler for Regression Monte Carlo**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Jose Alberto Cuminato**, Inst. de Ciências Matemáticas e de Computação, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“CeMEAI - Mathematical Sciences Applied to Industry”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



CeMEAI

CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
BATH



# IMPA–Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Marcel Ortgiese, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Branching random walks in random environment**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, ***Milton David Jara Valenzuela***, **Instituto Nacional de Matemática Pura e Aplicada**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Non-equilibrium fluctuations of interacting particle systems**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



# CERTIFICATE

We hereby certify that, **Paul Milewski, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Discussion**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Robert Morris**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work:  
**“Kinetically constrained spin models and bootstrap percolation”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Roberto Imbuzeiro Moraes Felinto de Oliveira**, Instituto Nacional de Matemática Pura e Aplicada, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Variational inequalities and random data**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Roberto Ribeiro Santos Junior**, **Universidade Federal do Paraná**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Flow structure beneath rotational water waves with stagnation points**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**





# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, ***Simon Richard Griffiths***, **Pontifícia Universidade Católica do Rio de Janeiro**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work:  
**“Moderate deviations in random graph subgraph counts”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Susie Douglas, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: “**Discussion**”.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Tim Rogers, University of Bath**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Epidemics in networks: the risky and the at-risk”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**



# IMPA-Bath Workshop in Mathematics

IMPA, January 23-27, 2017



## CERTIFICATE

We hereby certify that, **Yuan Jin Yun, Universidade Federal do Paraná**, participated in the IMPA-Bath Workshop in Mathematics, held at Instituto Nacional de Matemática Pura e Aplicada - IMPA - Rio de Janeiro, from January 23<sup>rd</sup> to 27<sup>th</sup>, 2017 and presented the following work: **“Numerical methods for fractional convection-diffusion equations”**.

Rio de Janeiro, January 30<sup>th</sup>, 2017.

André Nachbin  
Organizing Committee

organizing

impa



support



**CeMEAI**  
CEPID - Centro de Ciências  
Matemáticas Aplicadas à Indústria



UNIVERSITY OF  
**BATH**

