

We hereby certify that, **Alejandro Kocsard**, **Universidade Federal Fluminense**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Livsic theorem for cocycles with values in diffeomorphism groups.** 

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

**Organizing Committee** 

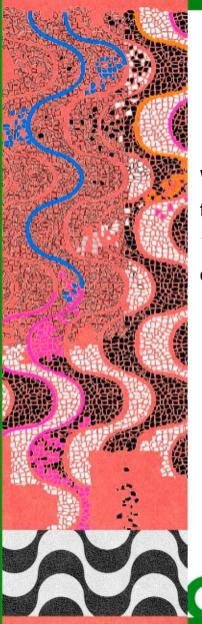
CERTIFICATE Support











We hereby certify that, **Andrés Navas**, **Universidad de Santiago de Chile**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **On ergodic type properties for codimension-1 foliations.** 

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

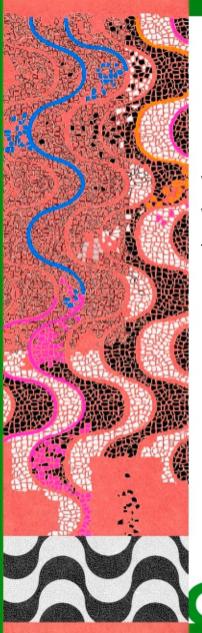
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We hereby certify that, **Artur Avila**, **Univ. Pierre et Marie Curie**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **TBA**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

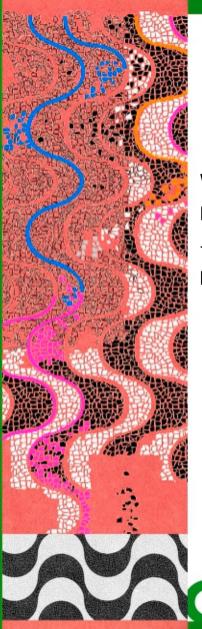
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We hereby certify that, Carlos Gustavo Tamm de Araujo Moreira, Instituto de Matematica Pura e Aplicada, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: On the Markov and Lagrange spectra and their dynamical generalizations.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

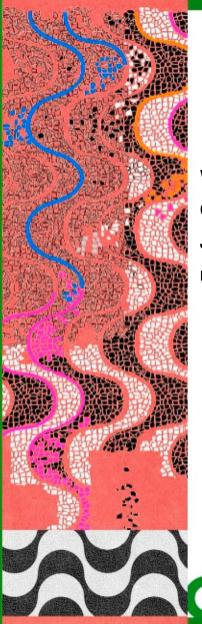
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We hereby certify that, **Daniel Smania Brandao**, **Inst. Ciên. Matemática e Comp. de São Carlos**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **On the renormalization operator for multimodal maps.** 

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

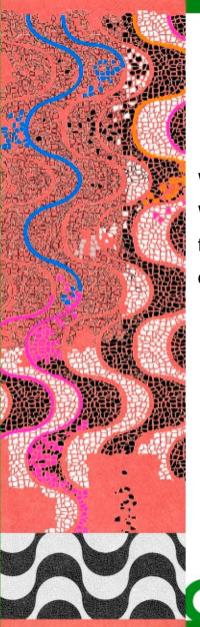
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We hereby certify that, **Davoud Cheraghi**, **Imperial College London**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Satellite renormalization of complex quadratic polynomials**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

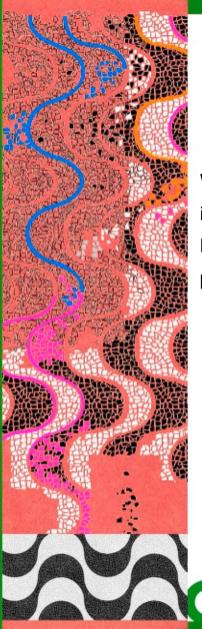
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We hereby certify that, **Edson de Faria**, **Instituto de Matemática e Estatística**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **On Sloane's persistence problem**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

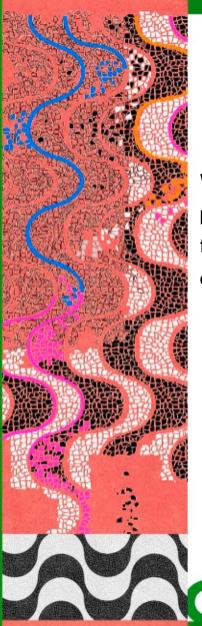
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We hereby certify that, **Enrique Ramiro Pujals**, **Instituto de Matematica Pura e Aplicada**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Boundary of chaos for dissipative annulus twist map.**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

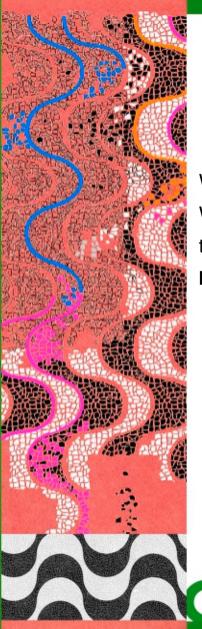
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We hereby certify that, **Jeroen Lamb**, **Imperial College London**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Additive noise does not destroy a pitchfork bifurcation**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

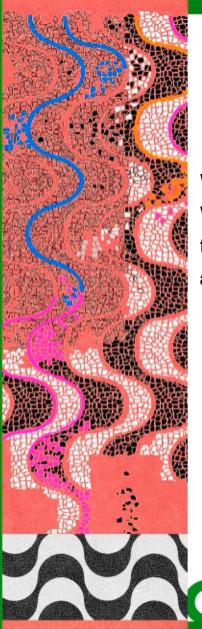
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We hereby certify that, **Juan Rivera-Letelier**, **PUC de Chile - Santiago**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Divergence of geometric equilibrium states** at zero temperature.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

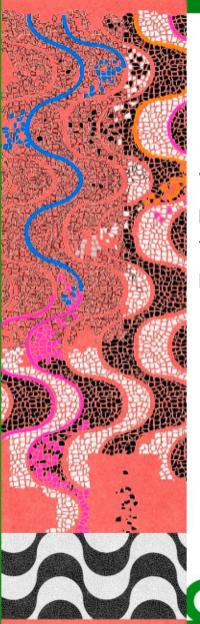
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We hereby certify that, **Kleyber Mota da Cunha**, **Universidade Federal da Bahia**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Renormalization for some piecewise smooth homeomorphisms of the circle**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

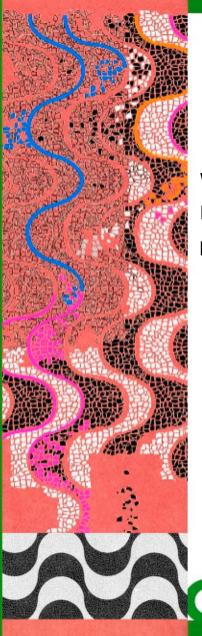
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We hereby certify that, **Maik Groeger**, **Tu Dresden**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **An entropy-like notion for low-complexity systems.** 

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

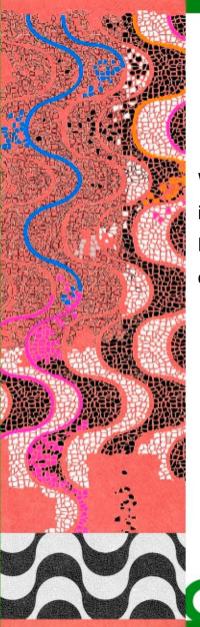
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We hereby certify that, **Pablo Guarino**, **Instituto de Matemática e Estatística**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Rigidity of smooth critical circle maps.**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

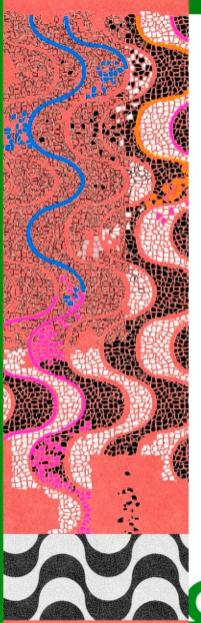
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We hereby certify that, Paulo Rogerio Souza Brandão, IMPA - Pós-Doutorando, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: On the Structure of Attractors of Contracting Lorenz Maps.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

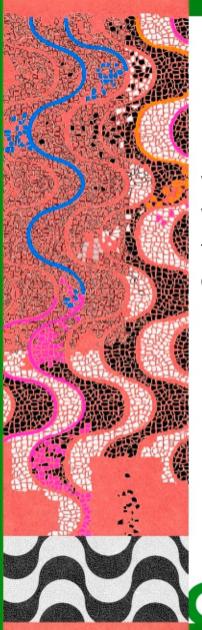
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We hereby certify that, **Sebastian Van Strien**, **Imperial College London**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Quasi-symmetric rigidity of interval maps** (Part I, II).

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

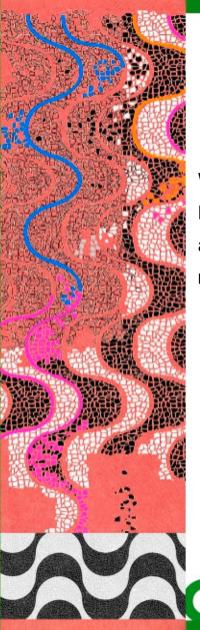
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We hereby certify that, **Sofia Trejo**, **University of Warwick**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **A unified proof of complex bounds for multimodal maps.** 

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

Organizing Committee

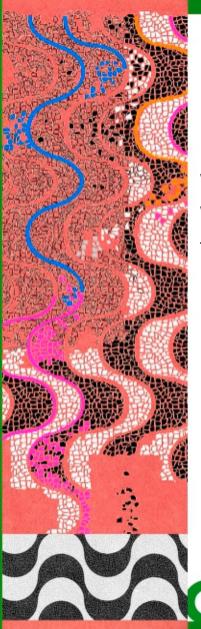
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We hereby certify that, **Vilton Pinheiro**, **Universidade Federal da Bahia**, participated in the Workshop on Low-Dimensional Dynamics, held at IMPA - Rio de Janeiro, from November 17 to 22, 2013 and presented the following work: **Finiteness of Attractors for One-Dimensional Maps**.

Rio de Janeiro, November 22, 2013.

Vilton Pinheiro

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