

Geometry and dynamical systems

Organizers

- Ronaldo Garcia (UFG, Goiânia, Brésil)
- Rémi Langevin (IMB, Université de Bourgogne Franche-Comté, Dijon, France)

Topics

Geometry and Dynamical Systems are two closely related areas of Mathematics which have interacted fruitfully for centuries. The session we propose collects topics mixing the two domains or aside from mainstream research :

Extrinsic geometry in \mathbb{R}^3 , \mathbb{R}^4 or of \mathbb{S}^3

- Study of the dynamics of lines of principal curvature and of Darboux curves.
- Extrinsic conformal geometry, Dupin and Darboux cyclides and a dynamical viewpoint in the set of spheres of \mathbb{S}^3 or of circles of ss^3 .
- Geometry of knots; knots in \mathbb{S}^3 and surfaces in \mathbb{R}^4 .

Singularities of vector fields, foliations and polynomials

- Geometry of hyperplane fields, foliations and polynomials near an isolated singular point.
- Discontinuous vector fields and applications.
- Desingularisation of singular foliations.

Others

- Integral geometry.
- Affine geometry and lines of principal curvature.

Speakers

- Alain Jacquemard (Université de Bourgogne- Franche Comté)
- André Ricardo Belotto da Silva, (Université d'Aix-Marseille, Marseille).
- Daniel Panazzolo (Université de Strasbourg and Laboratoire de Mathématiques, Mulhouse)
- Gioia Vago (Université de Bourgogne- Franche Comté, Dijon)
- Jorge Sotomayor (Universidade de São Paulo)
- Marcos Craizer (PUC-Rio)
- Marc Soret (Université F. Rabelais, Tours)
- Maria Alice Bertolim (Collège Le moulin à Vent, Thorigny sur Marne).
- Marina Ville (Université F. Rabelais, Tours)
- Rémi Langevin (IMB, Université de Bourgogne Franche-Comté, Dijon)
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