

Commutative algebra, Number Theory and Algebraic Geometry

Organizers.

- Eduardo Esteves (Impa)
- Hamid Hassanzadeh (UFRJ)
- Marc Hindry (Université Paris Diderot)

Abstract. The three themes – commutative algebra, number theory and algebraic geometry – are part of what is called in Brazil “*Álgebra*” and have very close connections and interactions: modern algebraic geometry is build upon commutative algebra, modern number theory, also called arithmetic geometry, is deeply entwined with algebraic geometry. The aim of this special session is to present a sample of research in this domain, focusing on topics that have been the subject of joint work between mathematicians from France and Brazil: moduli of curves and foliations, Castelnuovo-Mumford regularity, birationality criteria, arithmetic of algebraic curve, surfaces and abelian varieties.

Invited speakers.

- Carolina Araujo (Impa)
- Marc Chardin (CNRS, Paris)
- Alessandro Chiodo (Sorbonne Université)
- Bruno Kahn (CNRS, Paris)
- Amílcar Pacheco (UFRJ)
- Marco Pacini (UFF)
- Fabien Pazuki (Bordeaux and Copenhagen University)
- Aron Simis (UFPE)