

Automorphisms of quartic surfaces and Cremona transformations

Tuesday, 7 October 2025 15:00 (1 hour)

In this talk, I will address the following question, attributed to Gizatullin: “Which automorphisms of a smooth quartic surface in projective 3-space are restrictions of Cremona transformations of the ambient space?” Corti and Kaloghiros have introduced a general framework that is extremely useful for approaching this problem, namely, a special version of the Sarkisov program for Calabi-Yau pairs. I will report on recent progress on Gizatullin’s problem obtained using this theory, in collaborations with Alessio Corti and Alex Massarenti, and with Daniela Paiva and Sokratis Zikas.

Presenter: ARAUJO, Carolina (IMPA, Brazil)