____Chaire Jean-Morlet

K-STABILITY AND BIRATIONAL GEOMETRY OF REAL FANO THREEFOLDS K-STABILITÉ ET GÉOMÉTRIE BIRATIONNELLE DES 3- VARIÉTÉS DE FANO RÉELLES

The main theme of the chair is to explore the relationships between Real algebraic Geometry and Birational Geometry. The specific projects are rationality, Cremona groups and K-stability of Fano varieties. We plan to focus our thematic on Fano manifolds which are among the varieties with the richest birational geometry. The ambition and objectives of the project are triple: get into the real aspects of the birational geometry of Fano manifolds by bringing together experts of different areas of algebraic geometry: real algebraic geometers, K-stability specialists, Gremona specialists, rationality questions specialists to get synergy, aims to explore recent developments in K-stability theory and study of Cremona groups in particular in their real settings.

RESEARCH SCHOOL Winter School on K-stability 3-7 March 2025

RESEARCH IN RESIDENCE 1 K-stability 10-21 March 2025

WORKSHOP Cremona Groups 5-9 May 2025

RESEARCH IN RESIDENCE 2

Cremona Groups 12-23 May 2025



Chair > Ivan Cheltsov University of Edinburgh



Local Chair > Frédéric Mangolte (I2M Aix-Marseille Université)



<u>CONFERENCE</u>

Real Algebraic Geometry and Birational Geometry 2-6 June 2025

PROGRAM OF INVITATIONS Guests in residence during the semester

