A POINTLESS APPROACH TO K-STABILITY

HAMID ABBAN

K-stability is a notion initially introduced to detect existence of Kähler-Einstein metrics on Fano manifolds. However, the notion proved fruitful beyond this by providing the correct platform to construct compact moduli spaces for Fano varieties, amongst many other applications. In this talk I will uncover another facet of K-stability by exploring connections to existence of rational points over subfields of the complex numbers. This is based on a joint work with Ivan Cheltsov, Takashi Kishimoto, and Frederic Mangolte.