

MOTIVIC INVARIANTS OF BIRATIONAL MAPS AND CREMONA GROUPS

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Time: Wed, Apr. 20, 16:00-17:00

Venue: Zoom Meeting 891 2163 6889, password: cremona

Abstract: (Joint with E. Shinder and partly with S. Zimmerman) In characteristic zero, birational maps of projective varieties factorize through a sequence of blow-ups and blow-downs along smooth centers. We study to which extent these factorization centers are unique, and construct motivic invariants of birational maps which account for the non-uniqueness of centers. For surfaces over a perfect field, we prove the uniqueness of centers in the strongest possible sense. In higher dimension, the centers fail to be unique. Relying on the non-uniqueness, we provide new explanations of the non-simplicity of Cremona groups.