

Oberseminar Institut für Algebraische Geometrie

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Group actions and irrationality in surface families

Celebrated work of Nicaise-Shinder and Kontsevich-Tschinkel shows that (stable) rationality specializes in smooth families. In this talk, we investigate the analogous problem for the degree of irrationality, which roughly measures how far away a variety is from being rational. We prove that this degree can only decrease under specialization for families in dimension two, provided that the map computing the degree is Galois on the very general fiber. On the other hand, we provide (as yet unproven) examples that suggest this result should fail if we drop the Galois assumption. This work is joint with Nathan Chen.

Donnerstag, 22.05.2025, 16:30 - 17:30, Online. Leibniz Universität Hannover Alle Interessierten sind herzlich eingeladen.