

Mathematisches Kolloquium

Sixty–four Curves of Degree Six

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This lecture is an invitation to real algebraic geometry, along with computational aspects, ranging from bitangents and K3 surfaces to eigenvectors and ranks of tensors. We present an experimental study – with many pictures – of smooth curves of degree six in the real plane. This is joint work with Nidhi Kainhsa, Mario Kummer, Mahsa Sayyari and Daniel Plaumann. The number 64 refers to rigid isotopy types in the Rokhlin–Nikulin classification.