



Mathematics and CS Seminar

Curve classes on conic bundle threefolds and applications to rationality

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A variety is called rational if it admits a birational map to projective space. One of the major programs in algebraic geometry seeks to understand when a given variety is rational, and what the obstructions to rationality are. From this perspective, conic bundles are a geometrically rich class of varieties. I will talk about joint work with Sarah Frei, Lena Ji, Bianca Viray and Isabel Vogt, where we describe curve classes on certain conic bundle threefolds over arbitrary fields in terms of rational points on certain torsors of a Prym variety. We then use the description of these classes to study the rationality of such threefolds.

Thursday, January 25, 2024 01:00pm - 03:00pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



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