Algebra and Number Theory Seminar

Rationality of Brauer-Severi surface bundles over rational 3-folds

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Abstract: Rationality problems for conic bundles have been well studied over surfaces. In this talk, we generalize an etale cohomology diagram from the case of conic bundles to Brauer-Severi surface bundles over rational 3-folds. We use this generalization to prove a sufficient condition for a Brauer-Severi surface bundle to be not stably Rational. We also give an example satisfying these sufficient conditions.

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