Department of Mathematics and Statistics Colloquium

Hasse principle for higher degree hypersurfaces

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Abstract: A projective variety X defined over $\mathbb{Q}$ is said to satisfy the Hasse principle if presence of an adelic point on X guarantees $X(\mathbb{Q}) \neq \emptyset$. We prove that any non-singular projective quartic hypersurface satisfies the Hasse Principle as long as its dimension is greater than or equal to 35. The talk will start with a survery of Hasse Principle and elements of the classical Hardy Littlewood circle method. This is a joint work with Oscar Marmon.

Tuesday, April 12 at 3:45 in Roop 103

refreshments at 3:30