



Der Wissenschaftsfonds.



Institut f. Analysis und Computational Number Theory (Math. A)

## Zahlentheoretisches Kolloquium

Dienstag, 19. August, 10:00, s.t.

Seminarraum C 208, 2. Stock, Steyrergasse 30, TU Graz

## Rational points on cubic surfaces

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Abstract: Only very little is known about the asymptotic distribution of rational points on smooth cubic surfaces. In 1998, Slater and Swinnerton-Dyer proved lower bounds of the (conjecturally) correct order of magnitude for rational points of bounded height on cubic surfaces that contain two skew rational lines.

We discuss a new straightforward proof of this result that relies on a fibration of the surface into conics. Our proof has the additional advantage of working over arbitrary number fields.

This is joint work with Efthymios Sofos (Bristol).

R. Tichy