

**Speaker:** David Harbater

**Title:** Local-global principles for torsors

**Abstract:** Torsors often classify algebraic structures, such as quadratic forms and central simple algebras; and local-global principles for torsors can provide such principles for the corresponding structures. This has been studied classically in the case of torsors over global fields (number fields and one-variable function fields over finite fields). This talk, on recent and continuing work with Julia Hartmann and Daniel Krashen, will focus on the case of semi-global fields (one-variable function fields over complete discretely valued fields).

**Title for the RTG Seminar:** Introduction to torsors

**Abstract:** The RTG talk will provide an introduction to torsors, especially over fields, with respect to an action of some algebraic group. The talk will consider torsors from several perspectives, including geometry, cohomology, and the classification of algebraic structures.