The University of Chicago
ALGEBRAIC GEOMETRY SEMINAR

Wednesday, January 21ˢᵗ, 2015
4:30 – 6:00 pm, Eckhart 312

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Étale motivic cohomology and algebraic cycles

This talk will report on joint work with A. Rosenschon. There are examples show-ing that the torsion and co-torsion of Chow groups are complicated, in general, except in the "classical" cases (divisors and 0-cycles, and torsion in codimension 2). Instead, we may (following Lichtenbaum) consider the etale Chow groups, which coincide with the usual ones if we use rational coefficients; we show that they have better torsion and cotorsion if we work over the complex numbers. In contrast, they can have infinite torsion in some arithmetic situations (the usual Chow groups are conjectured to be finitely generated).