- César Lecoutre (Clermont-Ferrand) - Enveloping skewfield in dimension three

Abstract: In this talk I will present some recent results obtained with Jacques Alev and Francois Dumas about skewfield of fractions of enveloping algebras of three dimensional Lie algebras over an arbitrary based field. We focus primarily on a one parameter family of solvable Lie algebras and obtain a classification of their enveloping skewfields up to valued isomorphism. In a second part, I will show how theses skewfields also arise in noncommutative projective geometry as skewfields of fractions of certain Artin-Schelter regular algebras studied in a previous work with Susan Sierra.