ID de Contribution: **7** Type: **Non spécifié**

Rational Points On Linear Algebraic Groups

mardi 12 décembre 2023 11:30 (50 minutes)

In 1984, Oesterlé proved that a wound unipotent group of dimension strictly less than p −1 over a global function field of characteristic p has only finitely many rational points. The bound p −1 is sharp, as one can construct wound unipotent groups of dimension p −1 which are unirational and therefore have Zariski dense sets of rational points. Oesterle posed the natural question: Must a wound unipotent group over a global function field which admits infinitely many rational points admit a nontrivial unirational subgroup? One can of course formulate the question for arbitrary linear algebraic groups (though the wound unipotent case turns out to be the crucial one).

In this talk, I will discuss a proof of the affirmative answer to Oesterlé's question (in this slightly greater generality).

Orateur: ROSENGARTEN, Zev