

Nash blowups in positive characteristic

Andres Daniel Duarte¹

¹ ConacyT-UAZ

A classic theorem in the theory of Nash blowups, due to A. Nobile, states that over fields of characteristic zero, the Nash blowup is an isomorphism if and only if the variety is non-singular. It is also known that the positive characteristic version of this theorem is false. In this talk we show that by adding some mild hypothesis to a variety, then Nobile's theorem is true also in prime characteristic. Joint work with Luis Núñez Betancourt.