



Seminario de Álgebra, Geometría algebraica y Singularidades
La Laguna, 10 de diciembre de 2024, 15:00 horas (GMT+0)

Milnor number of plane curve singularities in arbitrary characteristic

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Reduced power series in two variables with coefficients in a field of characteristic zero satisfy a well-known formula that relates a codimension related to the normalization of a ring and the jacobian ideal. In the general case Deligne proved that this formula is only an inequality; García Barroso and Płoski stated a conjecture for irreducible power series. In this work we generalize Kouchnirenko's formula for any degenerated power series and also generalize García Barroso and Płoski's conjecture. We prove the conjecture in some cases using in particular Greuel and Nguyen.

Joint work with Enrique Artal Bartolo.

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