

SEMINARIO DE GEOMETRÍA ALGEBRAICA

Jueves 19 de abril de 2007, 13:00, Seminario 238

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Impartirá la conferencia

On the curvature of real algebraic varieties

Summary: The integral of the absolute value of the curvature, of Lipschitz-Killing type, on a embedded variety is an interesting invariant. In the complex case (smooth, compact) this invariant coincides with the Euler characteristic. In the real case this integral is bounded in terms of that of the complexified variety. We will study this bound, and its sharpness in the following cases:

- germs of plane branches (in the real and complex case)
- affine smooth algebraic varieties, in particular affine smooth curves
- T-curves and T-varieties
- amoebas et tropical curves.

This survey, include some open questions which arise from Lucia López de Medrano PhD-Thesis.