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# SEMINARIO DE GEOMETRÍA ALGEBRAICA

Martes 31 de enero de 2012, **14:00**, Seminario 238

**Kiyoshi Takeuchi**

Universidad de Tsukuba

Impartirá la conferencia

## Motivic Milnor fibers and Jordan normal forms of monodromies

*Resumen.*

We introduce a method to calculate the equivariant Hodge-Deligne numbers of toric hypersurfaces. We apply it to motivic Milnor fibers introduced by Denef-Loeser in order to study the Jordan normal forms of the local and global monodromies of polynomials maps in various situations. First we focus our attention on monodromies at infinity. Next we introduce some recent results on monodromies over complete intersections. The results will be explicitly described by the convexity of the Newton polyhedra of polynomials. This is a joint work with Y. Matsui and A. Esterov.