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# SEMINARIO DE GEOMETRÍA ALGEBRAICA

Viernes 7 de abril de 2006, 13:00, Seminario 238

**Vladimir Kostov**

Profesor de la Universidad de Niza

Impartirá la conferencia

Hyperbolic, very hyperbolic  
and stably hyperbolic polynomials

*Summary:* A polynomial  $P \in \mathbf{R}[x]$ ,  $x \in \mathbf{R}$ , is hyperbolic, if all its roots are real (in such a case all its derivatives are also hyperbolic). It is very hyperbolic, if it is hyperbolic and has hyperbolic primitives of all orders. It is stably hyperbolic if there exists  $k \in \mathbf{N}$  and a polynomial  $Q$  of degree  $\leq k - 1$  such that  $x^k P + Q$  is hyperbolic. In the talk we formulate some geometric properties of the domains of hyperbolic, very hyperbolic and stably hyperbolic polynomials.