Algebraic Geometry Seminar

The maximum likelihood degree of a very affine variety

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ABSTRACT

We show that the maximum likelihood degree of an algebraic statistical model is equal to the signed Euler characteristic of the corresponding very affine variety. This generalizes Orlik and Terao's solution to Varchenko's conjecture on arrangement complements to arbitrary smooth very affine varieties. We also prove a generalization of Kouchnirenko's theorem on very affine hypersurfaces and use it to construct new homaloidal hypersurfaces with any given degree.

- **Time & Date : 02:00p.m.~03:00 p.m. May 18 (Fri) 2012**
- **Place : Math Science Building room 404**

POSTECH Department of Mathematics   PMI Pohang Mathematics Institute   BK21 POSTECH BK21 Mathematics   GAIA Center for Geometry and Its Applications