Seminari de Geometria Algebraica 2007/2008 (UB-UPC) Divendres 30 de maig a les 15h. a l'aula B1 http://atlas.mat.ub.es/sga

Complete Intersections on Generic Hypersurfaces of \mathbb{P}^n

Anthony V. Geramita

Università di Genova (Italy) and Queen's University (Canada)

Let X be a generic hypersurface of degree d in \mathbb{P}^n . For which integers $a_1 \leq \cdots \leq a_r$ does there exist a complete intersection $Y \subset X$ whose ideal is generated by r forms of degrees respectively a_1, \ldots, a_r ?

We give a complete answer to this question when $2r \le n+2$ and some partial results when 2r > n+2.

This is work that has been done in collaboration with Enrico Carlini (Politecnico di Torino) and Luca Chiantini (Università di Siena).