

Seminari de Geometria Algebraica 2007/2008 (UB-UPC)

Divendres 22 de febrer a les 15h. a l'aula B1

<http://atlas.mat.ub.es/sga>

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## Seshadri constants and symbolic powers

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I will discuss recent work related to a question of Craig Huneke. Huneke asked if  $J^2$  contains  $J^{(3)}$  whenever  $J$  is a radical ideal defining a finite subscheme of  $\mathbb{P}^2$ . I will suggest a generalization for  $\mathbb{P}^N$ . In case  $J$  defines a finite set of generic points I will relate the problem to Seshadri constants and outline an approach to a proof. (In case  $N = 2$ , the approach works and thus  $J^2$  contains  $J^{(3)}$  whenever  $J$  is a radical ideal defining any finite set of generic points of  $\mathbb{P}^2$ .)

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