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# SEMINARIO DE GEOMETRÍA ALGEBRAICA

Viernes 3 de marzo de 2006, 13:00, Seminario 238

## Carlo Madonna

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Impartirá la conferencia

### ACM bundles on threefolds

*Summary:* Let  $X \subset \mathbb{P}^n$  be a smooth projective threefold and  $Pic(X) \cong \mathbb{Z}[H]$ , where  $[H]$  is the class of a hyperplane section. An arithmetically Cohen-Macaulay (ACM for short) vector bundle  $E$  on  $X$  is a vector bundle without intermediate cohomology i.e. such that

$$h^i(X, E(n)) = 0$$

for all integer  $n$  and  $i = 1, 2$ .

In the first part of the talk I will report on known results concerning the existence and the classification of irreducible rank 2 ACM bundles. In the second part I will consider the cases of rank bigger or equal than 3 (this is a joint work with E.Arrondo).