

Seminari de Geometria Algebraica 2011/2012 (UB-UPC)

Divendres 23 de setembre a les 16 h, aula B1 de la Facultat de Matemàtiques de la UB

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

---

## Generalization of Max Noether Theorem

Renato Martins

Universidade Federal de Minas Gerais

Given a nonsingular nonhyperelliptic projective curve with dualizing sheaf  $\omega$ , the assertion that  $\text{Sym}^n H^0(\omega)$  surjects onto  $H^0(\omega^n)$  is known as "Max Noether Theorem", the proof of which is based on Castelnuovo's theory. We show how to adjust the (extrinsic) argument to extend the result. We'll also see, within a different (intrinsic) way, that the assertion remains true for a larger class of curves. The first part is a joint work with S. L. Kleiman.

---