

## SEMINARIO DE GEOMETRÍA ALGEBRAICA

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Impartirá la conferencia

Plane quartic curve whose defining equation is  $g_1^2 + g_2^2 h$

#### *Resumen.*

A plane curve in  $\mathbb{P}^2$  whose defining equation has a certain "special" form can be considered as an interesting object to study. For example, an irreducible plane curve whose affine equation is of the form  $f^3 + g^2$  is called a  $(2, 3)$  torus curve. Such a curve has interesting properties and has been studied by several authors. In this talk, we consider plane curve having another special form  $g_1^2 + g_2^2 h$ . More precisely, we consider an irreducible quartic  $Q : f = 0$  and an irreducible conic  $C : h = 0$  such that  $f$  is given by  $f = g_1^2 + g_2^2 h$  for some polynomials  $g_1, g_2$  and the topology of the complement  $\mathbb{P}^2 \setminus (C \cup Q)$  via dihedral covers.