

**Speaker:** Irene Bouw

**Title:** Conductor and invariants of Ciani curves

**Abstract.** A Ciani curve is a plane quartic  $Y$  together with a subgroup  $V \simeq C_2^2$  of automorphism such that the quotient of  $Y$  by each element of order 2 has genus 1. The Ciani curves form a 3-dimensional family in the moduli space of curves of genus 3. In a previous paper, we defined invariants  $\underline{I} \in \mathbb{P}_{1,1,1,2}$  for this family. Given  $\underline{I} \in \mathbb{P}_{1,1,1,2}(\mathbb{Q})$  and an odd prime  $p$  for which the Ciani curve  $Y_{\underline{I}}$  with these invariants has potential good reduction, we determine the minimum of the conductor exponent at  $p$ . Here the minimum is taken over all  $K$ -models of  $Y_{\underline{I}}$ .

**N.B.** This is joint work with Coppola, Lorenzo Garcia, and Somoza.