

## The Bourbaki number of a plane curve

Marcos Benevenuto Jardim  
University of Campinas, Brazil

The study of free plane algebraic curves has a long history in algebraic geometry and commutative algebra, going back to the work of Saito in the 1980s. After briefly revising this theory, I will introduce the Bourbaki number of a plane curve, an invariant that measures how far from being free a given curve is. I will also discuss three 0-dimensional schemes naturally associated with a curve and a syzygy for its jacobian, explaining how they are related to each other.