Canonical curves and quadrics: old and new

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Abstract

It is a very classical theorem in Algebraic Geometry that the canonical image of a smooth curve of genus $g \geq 5$ (and of Clifford index at least 2) is the intersection of the quadrics containing it. This result goes back to Noether, Babbage, Enriques and Petri and has been revisited and reinterpreted in the last decades by Green, Lazarsfeld, Mumford, Shokurov and many others. The main goal of the lecture will be to give a short review of the basic definitions and main concepts needed to understand the ideas coming around. In the last minutes we will report on a generalization obtained in 2016 in collaboration with V. Marcucci and G.P Pirola.