

# Séminaire d'Algèbre, Topologie et Géométrie

## Vendredi 5 Octobre à 14h00

### Salle I

**Ciro Ciliberto**

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**Title :** *Variations on Nagata's conjecture.*

**Abstract :** It is known that the Segre-Harbourne-Gimigliano-Hirschowitz conjecture for linear systems of plane curves with general multiple base points implies Nagata's conjecture. This, in turn, can be expressed as a (rather delicate) property of the Mori cone of the blow-up of a plane at ten or more general points. This viewpoint suggests a natural intermediate conjecture, i.e it is implied by the SHGH and implies Nagata. I give some little evidence for it, by showing that the property it predicts, holds for some linear systems on the blow-up of a plane at ten or more general points. This is based on a lemma, proved with degeneration techniques, of which I give also some other application. This is joint work with B. Harbourne, R. Miranda and J. Roé.