



## Seminario congiunto

Dipartimento di Matematica – Centro Internazionale per la Ricerca Matematica

**Martedì 20 gennaio ore 14.00**

Aula Seminari – Dipartimento di Matematica

# On the effective cone of $(P^n)$ blown-up at $(n+3)$ points

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### ABSTRACT:

We start with an overview on Interpolation Problems. In particular, we study linear systems of hypersurfaces of a fixed degree passing through a collection of  $(n+3)$  general points with assigned multiplicities.

We prove that the rational normal curve of degree  $n$  passing through the points, its secant varieties and joins with linear subspaces are cycles of their base locus and we compute their multiplicity.

This yields a conjectural formula for the dimension of such linear systems, completing a conjecture in the commutative algebra setting due to Froberg-Iarrobino. We compute the facets of the effective and movable cones of divisors on blown-up projective spaces.

This is joint work with M. C. Brambilla and E. Postinghel

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