

PRAGMATIC 2014

The 16-th edition of the PRAGMATIC Summer School took place in Catania between June 23 and July 11, 2014. The lecturers were Aldo Conca (Università di Genova), Srikanth Iyengar (University of Nebraska) and Anurag Singh (University of Utah), assisted by Matteo Varbaro (Università di Genova). The school was attended by 25 students from Colombia, Iran, Italy, Lebanon, Portugal, Spain, Turkey, United Kingdom, United States of America, and Vietnam.

The title of the school was

“Local cohomology and syzygies of affine algebras”.

In the first week the lecturers presented background material and research problems on the following topics: local cohomology, resolutions with algebra structures, determinantal rings, complete intersections, the Weyl algebra, Koszul algebras and their syzygies, Koszul homology of Koszul algebras.

By the end of the first week, students were grouped into working teams, based on their choice of problem to work on. During the remaining two weeks, each team worked under guidance of the lecturers and the assistant, and some more lectures were given on request. By the end of the second week each team presented, to all the participants of the school, their progress on the chosen problem; the same activity was repeated on the last day of the school.

The present issue of *Le Matematiche* contains four of the papers that have been produced since the end of the school.

Aldo Conca
Srikanth B. Iyengar
Anurag K. Singh