

# Curriculum vitae of Maria Grazia Cinquegrani

## Informazioni personali

Education : degree in Mathematics, magna cum laude, at the University of Catania.

### Didactic activity

da ottobre 1993 ad oggi : Associate Professor in Geometry at the Engineering Faculty of the University of Catania

da gennaio 1982 a settembre 1993 Researcher at the Department of Mathematics and Computer Science of Catania

da aprile 1979 a settembre 1993 Delegate Professor of Geometry at the Engineering Faculty of the University of Catania

da novembre 1974 a Marzo 1979 Postdoc at the Engineering Faculty of the University of Catania

She has always taught Geometry first and then Linear Algebra and Geometry at the degree courses of the Engineering Faculty of the University of Catania.

Since 2005 for three years she has been teaching at the bilateral project of orienting and tutoring between the Engineering Faculty of the University of Catania and high schools of Catania.

### Research

The first studies have been in Mathematical Physics, began with the degree thesis entitled "Stationary perfect fluids", with advisor Prof. Enrico Oliveri. Then she moved to the study of Commutative Algebra, attending in 1977 two summer courses in Perugia about Algebraic Topology and Number Theory and in 1978 in Cortona a course on Commutative Algebra.

In 1977 she enrolled the C.N.R. as researcher, the G.N.S.A.G.A and the research group of Commutative Algebra and Algebraic Geometry, coordinated by Prof. Rosario Strano of the University of Catania. The research in this subject continued till 2008, organizing national and international workshops and giving talks to various workshops.

The problems studied in Commutative Algebra are related to divisible domains, mainly regarding its relations to valuation rings, henselianity conditions and homomorphisms. Then she moved to Algebraic Geometry, studying problems related to nonsingular plane projective curves, finding some results related to the minimal degree of nonsingular plane curves containing a given zero-dimensional scheme and to the minimal degree of irreducible curves containing a given zero-dimensional scheme. Then she studied curves of maximal genus and maximal curves in the three-dimensional projective space.

In these last years she moved to Graph Theory, studying problems related to edge coloring, and she returned to Commutative Algebra, studying projective and weakly projective modules on a principal ideal domain.

The results of her studies have been published on national and international journals.

Service to the University and Department

She attended all the activities of the Department of Mathematics and Computer Science of the University of Catania that she have requested for and to all the activities related to the degree courses of the Engineering faculties in which she has taught.

In this years she is a component of the Academic Senate of the University of Catania.