



Advanced
Algebra and
Geometry

R. Pignatelli

Why?

Our point of view
Your point of view

Study plan

Caratterizzanti
Affini

Contacts

Advanced Algebra and Geometry

An *Orientamento* for the Curriculum

Advanced Mathematics

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Why do WE offer this program

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- **More than a third** of the members of our department is doing research in Algebra, Geometry and/or their interactions, such as in Algebraic Geometry.
- Good students who learned enough algebra and geometry may start **Thesis Projects at Research Level** and give, through their Master Theses, important contributions to our research projects.
- We need for that to attract students who like algebra and/or geometry.
- We need for that to **give** them a **strong background in algebra and geometry**.



Why should YOU choose this program

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Assuming you are interested in Algebra, Geometry and/or their interactions, and you are considering doing research in these fields.

- Quantity: so many algebraist and geometers = wide offer of lectures and of topics for Theses.
- Quality: according to the Italian Ministry of Education our Department is at the top in Italy for the research in these fields: more precisely the research groups in Algebra and Geometry were 1st and 2nd in the respective rankings in the latest *Valutazione della qualità della ricerca*



Study plan: caratterizzanti

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Our *orientamento* includes 5 *caratterizzanti* courses in different areas.

This means that you are supposed to take all of them, to ensure you get a wide mathematical background.

- **Computational Algebra**
- **Advanced Geometry**
- Advanced Analysis
- Stochastic Processes
- Mathematical Physics



Study plan: affini

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We offer 12 more courses in Algebra and Geometry.
The more you take courses from this list, the more your
Thesis topic will be advanced!

- Model Theory
- Set Theory
- Discrete Fourier Analysis
- Advanced Group Theory
- Finite Fields and Symmetric Cryptography
- Advanced Commutative Algebra
- Algebraic Geometry I
- Algebraic Geometry II
- Homological Algebra
- Algebraic Topology
- Real Algebraic Geometry
- Geometric Analysis



Questions?

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Do you want more details?

Fill free to contact

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