

## Universita' di Genova

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| <b>Name of the organisation :</b> | Universita' di Genova |  |
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| <b>Function:</b>                    | Associate Professor   |   |
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**Type of organisation:**

SME     School     University     Public Authority   
 Training     No Profit     NGO

Other (Specify)

**Fields of action:**

SMEs     Youth     Universities     Public Authorities   
 Equal opportunities     Schools     Unemployed

Other (Specify)

## Description of the organisation

The University of Genova (UNIGE) is one of the most ancient of the European large universities. The University was founded in 1592 by means of Regio Decreto n. 1592 but its history can be traced back several centuries (14th century).

UNIGE is a public institution provided with scientific, educational, organizational and financial autonomy and it is involved in the building of a European area for research and advanced professional training. It operates in accordance with the principles of the Constitution of the Italian Republic and of Magna Charta subscribed by European Universities in 1988.

With its 126 Degrees, more than 55 Postgraduate Schools, and 26 Masters, UNIGE provides a truly multi-disciplinary teaching offer to more than 30.000 students, and nearly 2.800 international students. UNIGE counts 22 Departments, 27 PhD courses, 55 Specialisation Schools, an Integrated Library System, 12 Research and Service Centres, and 2 Centres of Excellence.

The staff shall consist of 1255 academics, 401 postdocs, 1399 laboratory technicians and administrative personnel.

UNIGE has a strong participation in the most important EU and international research and cooperation Programs. Discoveries, inventions, advances achieved by research activities are successfully commercialized.

UNIGE is currently involved in over 68 projects funded under FESR-Interreg, LIFE (25 projects since 1999) and other international funding instruments and has over 116 projects in FP7 and 39 active projects under H2020 (7 of which are Marie Curie Actions - 2 Rise, 2 ITN and 1 Night).

More information is available at the following link: [https://unige.it/ricerca/prog\\_euint/index.shtml](https://unige.it/ricerca/prog_euint/index.shtml).

The Department of Mathematics (DIMA) is a dynamic Department of UNIGE and a driving force for the entire University. DIMA is very active in both education and research activities. DIMA offers bachelor courses (3 years) and master courses (2 years) along with PhD programs. The Department of Mathematics has a strong research culture, with researchers of international stature in each of its main specialisms (around 40 members of academic staff; around 30 full-time postgraduate students). Regular research seminars and specialist meetings provide a stimulating research environment and opportunities to interact with international experts.

For more information, see: <http://www.dima.unige.it>.

## Experience of the organization in previous European projects

DIMA provides a good starting point for young scholars in the field to build and nurture individual international networks. The Department participates to several regional, national (n. 10 PRIN - projects of national interest; 1 FIRB Future in Research), and international and European research programmes (1 FP2-ESPRIT; 1 FP5-IST; 1 FP7- SPACE, 2 FP7-PEOPLE, 1 Marie Skłodowska-Curie-IF action) and thematic networks (INDAM research programmes).

DIMA is currently involved in several European projects such as H2020-FETOPEN-2015-CSA (SC-square - Satisfiability Checking and Symbolic Computation: uniting two communities to solve real problems); H2020-PROTEC-2014 (Flare Likelihood and Region Eruption Forecasting); programme of international mobility: H2020-MSCA-COFUND-2015 Proposal: 713485 -INDAM-DP-COFUND-2015.

DIMA is involved in two Erasmus Plus Strategic Partnerships projects: DoWellScience and

### **Experience and Expertise of the organization in the project's subject area**

In 2004 the Italian Ministry for Instruction, University and Research (MIUR) founded the national Project "Lauree Scientifiche" ("Scientific degrees") (PLS in the following), whose aim was fostering the enrolment in university courses with scientific orientation, stimulating young people's interest in studying sciences and providing a better education in the base sciences. The project had several strands, going from special interventions for "high-achieving students" to pre-university orientation programs. Among them, the so-called PLS Laboratories, that is to say special lessons, performed in the school environment through a collaborative work between university researchers and school teachers. The prevalence of students with mathematics learning disabilities has triggered since several years an interest of among special education researchers and practitioners at the Department of Mathematics in developing an understanding of the needs of this group of students, and in identifying effective instructional programming to foster their mathematical performance during the school years and into adulthood. DIMA research into the characteristics of students with mathematics learning disabilities is being approached from different cross-disciplinary perspectives, and it helps teachers, tutors and parents develop a broader understanding of students' learning needs and difficulties.

### **Contributions that can be provided to the project**

DIMA is the coordinator of the SMiLD project.

The Math's Department will also work with all partner to realize all activities serving the dissemination and exploitation of results.

### **Reasons of involvement in the project**

DIMA has historically strongly prioritised third level education, also improving the support for research training, with the aim at always pursuing the highest standards. It has a strong experience in training for 30 years. Since 2003 DIMA is the main organizer of the Mathematical Team Competition, through which a network of schools has been created. Together with the Italian Ministry (MIUR) UNIGE is protagonist of a national Project "Lauree Scientifiche" ("Scientific degrees") whose aim is stimulating young people's interest in studying sciences.

## Contact Person's Experience and Expertise

### **Emanuela De Negri**

Emanuela De Negri, Associate Professor in Commutative Algebra at University of Genoa, Department of mathematics.

She has more than 20 years' experience of teaching and in supervising school and university teachers.

Since 2001 member of the Orientation Commission of the Degree in Mathematics.

Since 2004 she is involved in "Piano Lauree Scientifiche", a project supported by Italian Government to improve the teaching of Mathematics in the school. From 2012 she is the local leader of this project.

She was invited or involved in the organisation of many conferences and international schools in Commutative Algebra, and its interactions with Combinatorics and Algebraic Geometry.

### **Francesca Morselli**

Francesca Morselli graduated in Mathematics at the University of Genoa (2002) and obtained her Ph.D. in Mathematics at the University of Turin (2007). Since 2015 she is associate professor of Mathematics Education at the Department of Mathematics of the University of Genova (Italy), where she works in pre-service and in-service teacher education programs. Her research focuses on: argumentation and proof in mathematics; formative assessment in mathematics classroom; the interaction between affective and cognitive factors in the teaching and learning of mathematics.

### **Anna Siri**

Sociologist, PhD in Evaluation of Educational Processes and Systems. In July 2017, she held the habilitation as Associate Professor in Sociology according to the Italian National Scientific Habilitation Procedure (ASN 2016-2018). Her main fields of work are international comparative studies in education. Her research areas of interest include the measurement and determinants of instruction, how educational innovations impact instruction, and how instruction affects student learning. She has published many articles and reports related to assessment and evaluation, quality assurance and institutional effectiveness, and she has actively participated in paper presentations and symposiums at major research association meetings. She has many years of experience as a project manager and scientific writer. For more information see: <http://cattedraunesco.unige.it>

### **Paola Viterbori**

Research assistant of developmental and educational psychology at the University of Genoa. Her main research interests include the role of executive function in language development and mathematical achievement and the training of executive function in childhood. She teaches school psychology at the Master's degree in Psychology, at the University of Genoa. She is a founding member of a university spin-off for intervention in learning disorders and staff member of a research Unit in the field of learning and language difficulties at the Department of Education Sciences of the University of Genova. She is a consultant for in-service training of educational staff and teachers of the Preschool Educational Services of the Municipality of Genova.