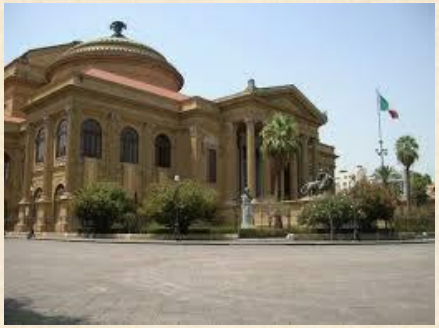
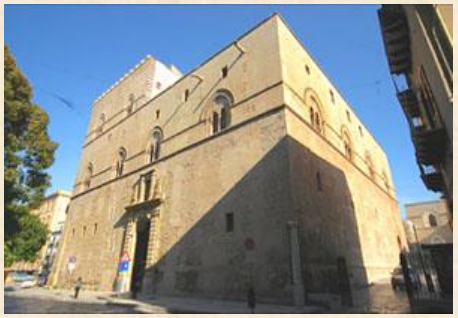
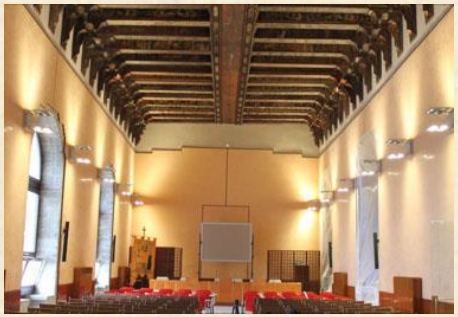
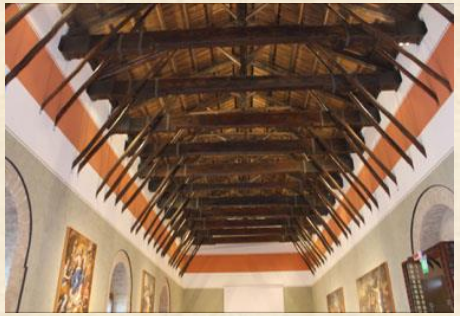
Science4Earth









UNIVERSITÀ DEGLI STUDI DI PALERMO

SCUOLA SCIENZE DI BASE E APPLICATE
UNIVERSITÀ DEGLI STUDI DI PALERMO

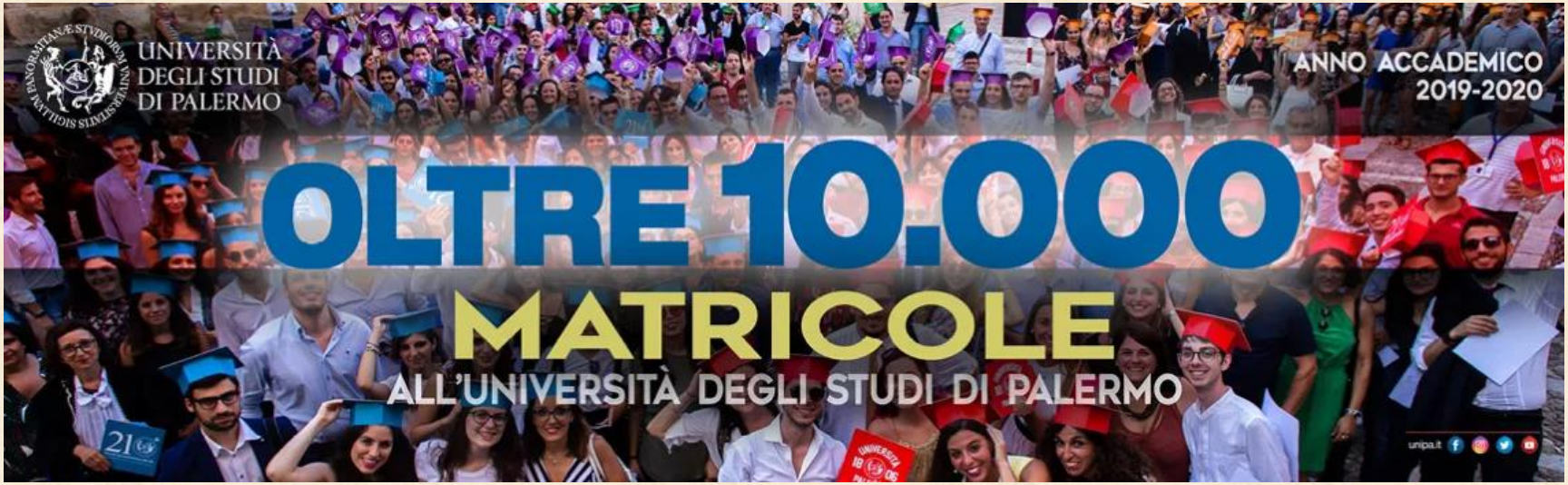
DiFC
Dipartimento di Fisica e Chimica - Emilio Segrè

PRINCIPAL INVESTIGATOR
DOMINIQUE PERSANO ADORNO

- *DIPARTIMENTO DI FISICA E CHIMICA E. SEGRE'*

https://www.youtube.com/watch?v=jqMgDxrU8CA
(UNIPA)

Science for Earth



- The **University of Palermo** is one of the largest public University in Italy
  - more than 50.000 students – 3.500 employees
  - represents a consolidated cultural, scientific and teaching presence in central-western Sicily

From Information Technology to Biology, from Mathematics to Medicine, to Social Sciences and Preservation of Cultural Heritage UniPA's researchers work to contribute to innovation and progress of the international scientific community and the world of production

UNIVERSITÀ DEGLI STUDI DI PALERMO

Dominique Persano Adorno

Partner Introduction: **UniPA**

ATENEO DI QUALITÀ
ACCREDITATO DAL MIUR

HR EXCELLENCE IN RESEARCH

FORTHEM | EUROPEAN UNIVERSITIES
MEGATENEO EUROPEO

Its 16 Departments cover the most important domains of current scientific and technological knowledge. About 122 courses (BS and MS) are yearly offered, as well as 44 master and specialization, and about 30 PhD courses, targeted to the training of specific professional figures, often in cooperation with external institutions and companies.

UniPA is also present in Agrigento, Caltanissetta e Trapani.

UNIVERSITÀ DEGLI STUDI DI PALERMO

Partner Introduction: **UNIPA**

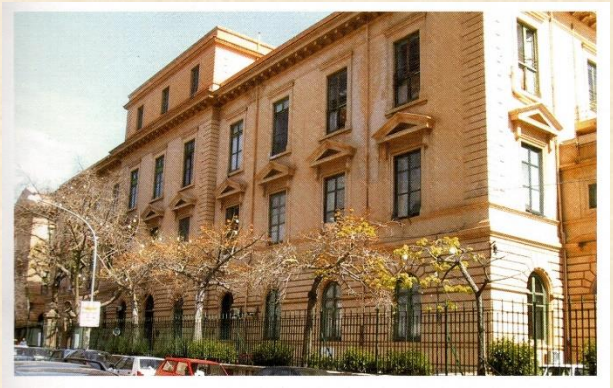
Successful technological transfer implies the full synergy of innovative technologies, scientific expertise, production systems and processes.

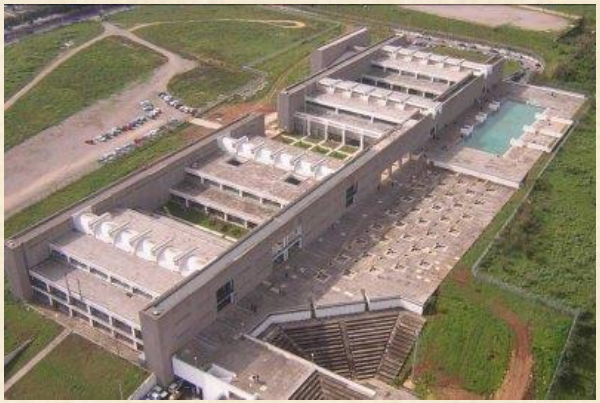
University of Palermo has several Research Labs, embedded within the Departments and three main interdisciplinary Research bodies:

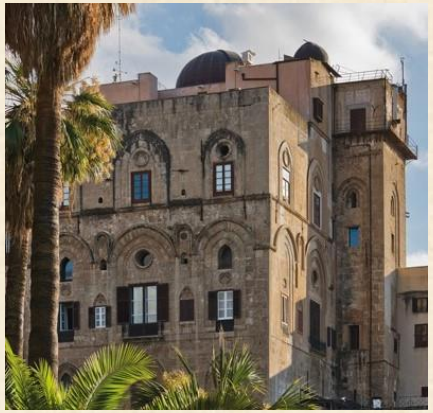
- ex-**UniNetLab**: a network of University labs for Technology transfer
- An Advanced Technologies Network Center (**ATeN**)
  mainly focused on **biomedicine**, **biotechnology** and **biophysics**
- A start-up incubator, named **ConsorzioArca**,
  with 40 SME in the spin-off and/or acceleration phase

Partner Introduction: **UNIPA**

- **DiFC (Department of Physics and Chemistry)** participates to Science4Earth project. It manages the Physics degree course (first and second level), the bachelor degree in Optics and Optometry, the Master Degree in Conservation and Restoration of Cultural Heritage, the second level Degree in Chemistry, the PhD in Physics and Chemistry, the Master in Medical Physics.







Science for Earth

DiFC distinguishes for the success in the approval of European and National projects and for the numerous collaborations with national and international research centers.

- The most relevant skills and expertise of **DiFC** researchers for the Science4Earth project are:

i) innovative scientific quantitative and qualitative analysis methods;
ii) transfer of scientific know-how;
iii) new and strategic learning and training methodologies;
iv) use of modern Information Technologies (IT) in teaching/learning Science;
v) study of the learning of scientific concepts (conceptual nodes and cognitive problems);
v) applied research and modeling processes.

Dominique Persano Adorno

Science for Earth

UniPA's researchers involved in the project have good expertise in the field of:

a) learning and knowledge acquisition in STEM;
b) computational models and Artificial Intelligence (AI) learning systems;
c) novel ICT educational tools;
d) technology-supported learning environments.

The researchers of the UNIPA Unit are involved in the organization and chairing of national and international conferences, both in the framework of EU-funded research projects (Green-Edu, BioS4YOU, ODL, ESTABLISH, HOPE, IRRESISTIBLE) and of projects funded by the Italian Ministry for Education.

Also part of the UNIPA team:
(i) post-doc researchers with great experience in STEM Education;
(ii) a group of about thirty teachers of the Sicilian high-schools;
(iii) numerous middle and high-schools (associated partners)

The UniPA team

- • Dr. Dominique Persano Adorno, PhD in Applied Physics, is Associate Professor of Applied Physics at DiFC-UniPA. Her current research interests include spin electronics in semiconductors, 2D materials and graphene, complex systems and bioengineering, active learning and inquiry-based science education. Head of the didactical "Laboratory of Modern Physics and Physics of Semiconductors", she holds a rich experience in European projects concerning the improvement of teacher's ability on building effective learning environments aimed at strengthening competencies integrating content knowledge with problem solving skills. Until April 2018 she has been local Coordinator of the European Project Erasmus+ KA2 "Open Discovery of STEM Laboratories (ODL)". From November 2019 she is local coordinator of the Projects Erasmus+ KA2 "Bio-inspired STEM topics for engaging young generations (BioS4You)" and "Green Education for a sustainable future (Green-Edu).

https://www.youtube.com/watch?v=T8Yxjf5hv-E
(Ciao Palermo, Monza is calling)

https://www.youtube.com/watch?v=Cq2PDsAHjBI
(Sicily-the Land of beauty)

https://www.youtube.com/watch?v=HvswM33bz4M
(Palermo in one minut)