



European Physical Society



Messina



European Physical Society Young Minds **Section of Messina**

Antonino Foti
(vice-president)

2nd Leadership meeting,
21-23 June 2013, Mulhouse - France

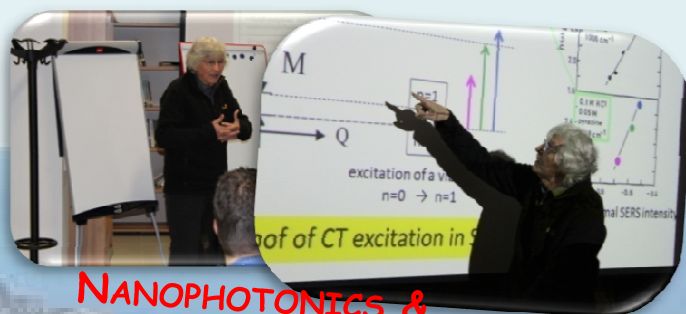




ACTIVITIES



SEMINARS:



NANOPHOTONICS &
PLASMONICS



IONIC
LIQUIDS



QUANTUM
INTERFERENCE

OUTREACH:



YM MEMBERS AMONG
HIGH SCHOOL STUDENTS

VISITS:

PLANETARIUM
PHYTAGORAS





SEMINARS



OUR TYPICAL SEMINAR

- ❖ Symposium focused on high impact physics topics
- ❖ 1-2 invited speakers of international level plus researchers from local scientific community.
- ❖ presentations from the basic principles to the recent research results
- ❖ Credits for students (ECTS)

AUDIENCE

More than 50 people from University of Messina, Catania, Palermo and Reggio Calabria, composed by

- Bachelor , master and Ph.D. students;
- researchers and professors

Our aim is to send a message of scientific communication in which the students are the main interlocutors



SEMINARS



Symposium on "QUANTUM INTERFERENCE"

- ❖ **Ettore Majorana and the birth of autoionization**

Prof. Ennio Arimondo (University of Pisa)

- ❖ **Fano resonances in Si and Si nanostructures**

Dr. Alessia Irrera & Dr. Barbara Fazio (IPCF-CNR, Messina)

- ❖ **Playing with quantum coherence in nanophotonics**

Dr. Alessandro Ridolfo (University of Messina)



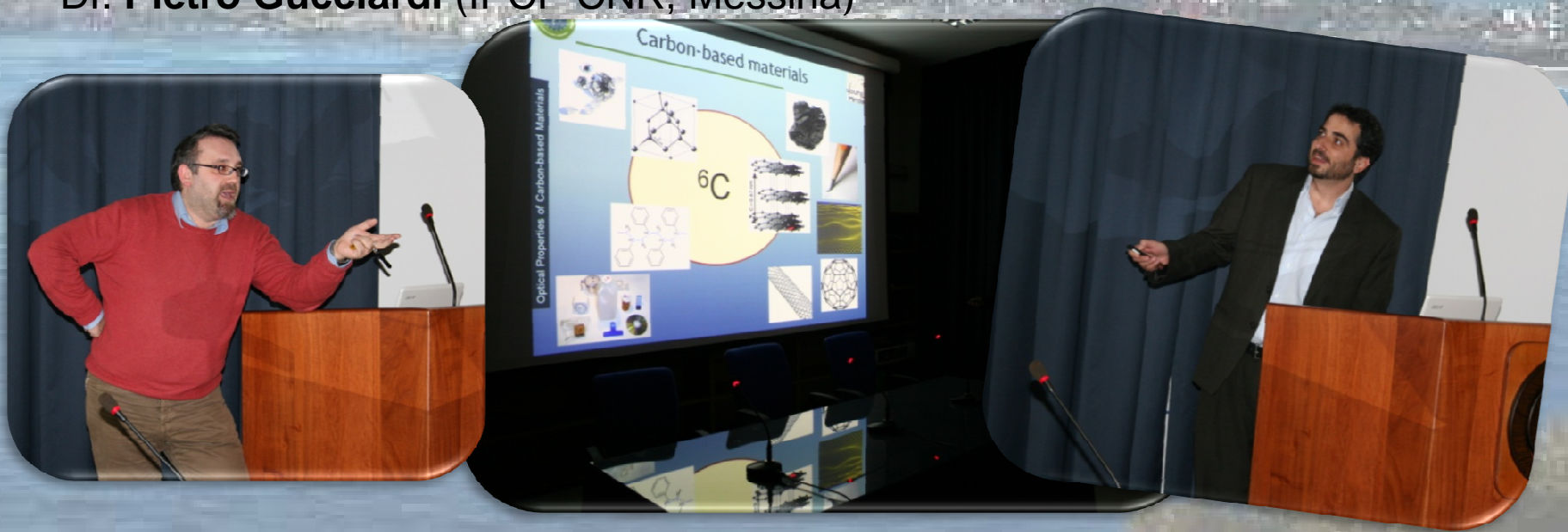


SEMINARS



Symposium on "Carbon-based Materials & SERS"

- ❖ **Optical properties of carbon-based materials**
Prof. Elefterios Lidorikis (University of Ioannina, Greece)
- ❖ **Strongly Polarized Surface Enhanced Resonant Raman Scattering from Many Randomly Oriented Molecules on Gold Nanowires: Influence and Quantitative Evaluation of the Re-Radiation Effect**
Dr. Pietro Gucciardi (IPCF-CNR, Messina)





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Symposium on "Ionic Liquids"

- ❖ **Prof. Luís Paulo N. Rebelo**
(ITQB, Universidade Nova de Lisboa)
- ❖ **Dr. José Esperança**
(ITQB, Universidade Nova de Lisboa)
- ❖ **Dr. Isabel Mota Veiga**
(ITQB, Universidade Nova de Lisboa)
- ❖ **Dr. Alessandro Triolo** (ISM-CNR, Roma)
- ❖ **Prof. José Nuno Canongia Lopes**
(ITQB, Universidade Nova de Lisboa)
- ❖ **Dr. Karina Shimizu**
(ITQB, Universidade Nova de Lisboa)
- ❖ **Dr. Barbara Fazio** (IPCF– CNR, Messina)





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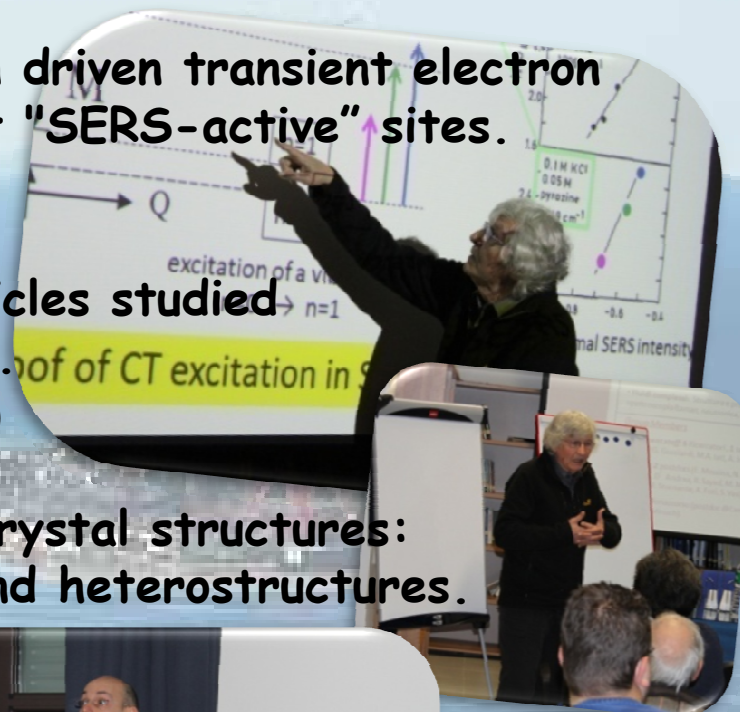


Symposium on Nanophotonics & Plasmonics

- ❖ The chemical contribution to SERS by photon driven transient electron (or hole) transfer from metal to adsorbate at "SERS-active" sites.
Prof. Andreas Otto (University of Düsseldorf)

- ❖ Plasmonic properties of noble metal nanoparticles studied with the discrete dipole approximation dipole.
Prof. Vincenzo Amendola (University of Padova)

- ❖ Solution growth approaches to complex nanocrystal structures: semiconductor-based colloidal nanocrystals and heterostructures.
Dr. Luigi Carbone (IPCF – CNR)





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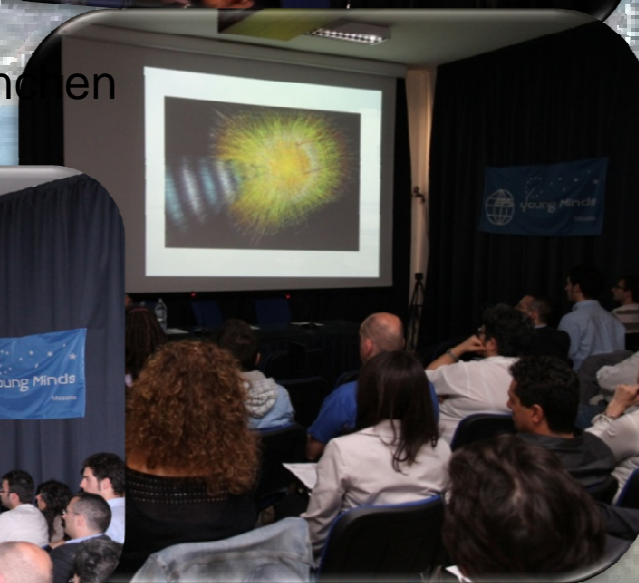
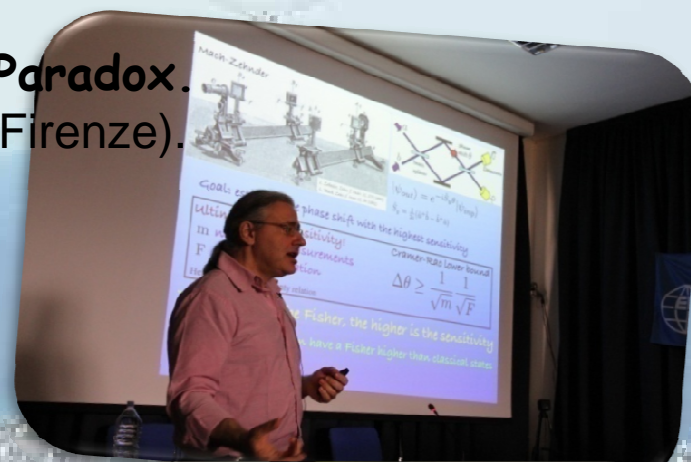
The 7th Day with Theoretical Physics in Messina

❖ **Distinguishability, Entanglement and the Zeno Paradox.**
Dr. Augusto Smerzi (QSTAR, INO-CNR and Lens, Firenze).

❖ **Higgs boson - a Nobel particle.**
Prof. Paolo Castorina (University of Catania).

❖ **Other speakers:**

- Dr. Lucrezia Auditore (University of Messina)
- Dr. Alessandro Ridolfo (Technische Universität München)
- Dr. Dino Costa (University of Messina)
- Dr. Salvatore Spagnolo (University of Palermo)





SEMINARS



The 7th Day with Theoretical Physics in Messina





VISITS

**Planetarium
Phytagoras**




Young Minds
Messina



❖ Solar observation.

❖ Didactic lessons on astronomical phenomena and their reproduction by planetarium.

❖ Reserch talk on light scattering by interstellar dust
Dr. Antonella Iatì (IPCF-CNR, Messina)





OUTREACH



Partecipazione to:

- "18° Rassegna dell'Orientamento Universitario e Professionale"
- "Giornata degli Studenti di Fisica"

Young Minds members
among high school students

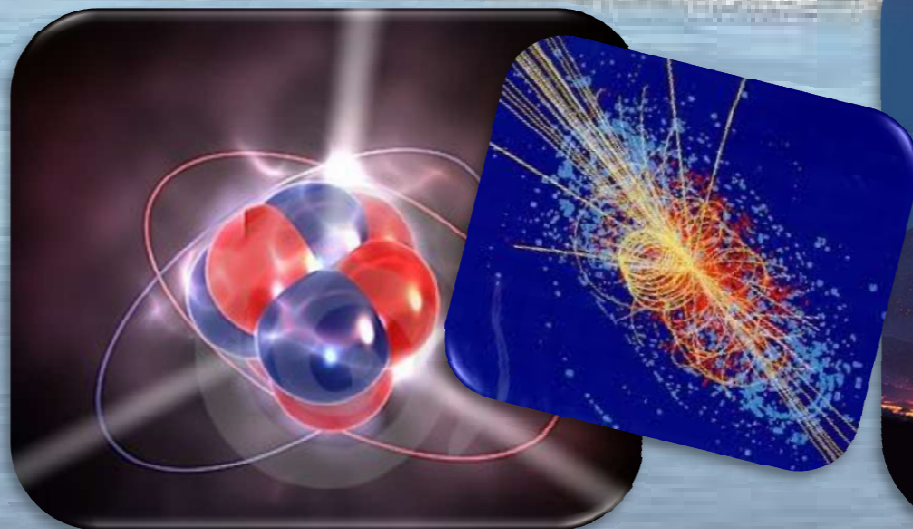
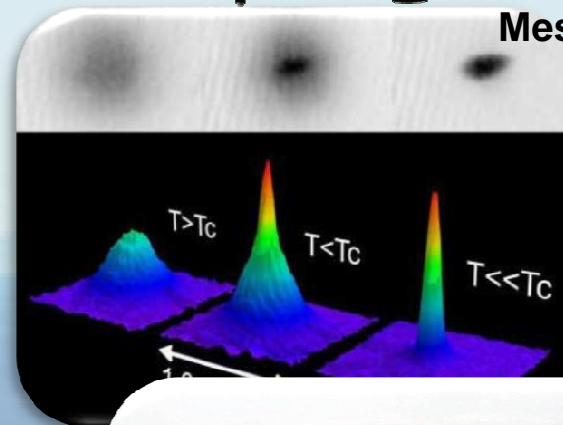




NEXT PROJECTS



- ❖ Supercooled Atoms (grant accepted)
- ❖ Symposia on Nuclear physics topics
- ❖ Approach to Geophysics:
excursion on volcano Etna





CONCLUSIONS



Thanks to the financial support of the EPS we are able to organize events in which we involve and fascinate **young physics students** to the many aspects of physics.

The informal atmosphere of events organized **"by Students for Students"** and the lively scientific discussions make us feel part of a community sharing its **Passion for Physics**.



European Physical
Society



**Thank you
For the attention**

INFO:

- ✓ <http://www.epsyoungminds.org/section/messina>
- ✓ EPS Young Minds Messina on Facebook



