



UGO FANO PRIZE 2019 and SYMPOSIUM

Majorana Fermions and Quantum Matter for Quantum Computing

Rome Dec 20, 2019 – Marconi Hall, CNR Headquarters

UGO FANO GOLD MEDALS



Gabriel Aeppli



Laurens Molenkamp

Program

CHAIRMEN: **Antonio Bianconi**, *RICMASS and IC-CNR*
Gaetano Campi, *IC-CNR*
Augusto Marcelli, *INFN-MAECI*
Andrea Perali, *Camerino University*

08:30-08:50 **Registration**

08:50-09:30 **Opening Session** – Chair **Augusto Marcelli**, *INFN-MAECI*
Annibale Mottana: *Academy of Science XL*
Luciano Galantini: *Sapienza University of Rome, Department of Chemistry*
Antonio Valletta: *Istituto per la microelettronica e microsistemi CNR-IMM*
Paola Gallo: *Roma Tre University Department Mathematics & Physics*
Massimo Capone: *SISSA and CNR-IOM Trieste*
Claudio Pettinari: *University of Camerino*
Michele Saviano: *CNR - Institute of Crystallography*

1st Session Chair: **Andrea Perali**, *Camerino University*
09:30-10:00 **Luciano Maiani**: *La lunga vita del Neutrino di Majorana*
10:00-10:30 **Massimo Inguscio**: *Ultracold fermions: from Fano resonances to quantum simulation*

10:30-10:40 **Antonio Bianconi Ugo Fano Prize Laudatio**:
The legacy of Ugo Fano and Ettore Majorana
10:40-11:10 **Laurens Molenkamp** (Ugo Fano Gold Medal Laureate)
11:10-11:20 *Ugo Fano Gold Medal ceremony*
11:20-11:50 **Coffee break**

2nd Session Chair: **Antonio Bianconi**, *RICMASS and IC-CNR*
11:50-12:00 **Andrea Perali Ugo Fano Prize Laudatio**:
Ugo Fano resonance and superconductivity
12:00-12:30 **Gabriel Aeppli** (Ugo Fano Gold Medal Laureate)
12:30-12:40 *Ugo Fano Gold Medal ceremony*

12:40-13:30 **PREMIO UGO FANO PER I GIOVANI**
Chair: **Piera Mattei**, **Mariangela Cestelli Guidi**,
Lina Lo Giudice Sergi, **Simona Perruzza**

13:30-14:30 **Lunch time**

Session Quantum Computation and Majorana Fermions

Chair: **Massimo Capone**: *SISSA and CNR-IOM Trieste*
14:30-15:00 **Simone Montangero**: *The second quantum revolution*
15:00-15:30 **Chiara Macchiavello**: *A novel quantum computing model for an artificial neuron*
15:30-15:50 **David Vitali**: *Quantum illumination and quantum radar*
15:50-16:10 **Alessandra Lanzara**: *Spin Orbit Coupling in quantum matter*
16:10-16:30 **Roberta Citro**: *Majorana fermions in generalized Kitaev models*
16:30-17:00 **Coffee break**

Quantum Complex Materials

Chair: **Gaetano Campi**, *CNR - Institute of Crystallography*
17:00-17:20 **Andrea Perali**: *A quantum complex material K-doped para-terphenyl*
17:20-17:40 **Floriana Lombardi**: *Induced superconductivity in 3D Topological Insulators*
17:40-18:00 **Y. Soh**: *Spin reorientation and magnetotransport*