

The 3rd International LARES Science Workshop
Fundamental Physics in Space:
Celebrating One Hundred Years of General Relativity

CENTRO FERMI

*Museo Storico della Fisica e Centro Studi e Ricerche "Enrico Fermi".
Via Panisperna 89, 00184 Roma (entrance: Piazza del Viminale 1).*

Final Program

Monday, June 15.

- 10.30 - 11.00 Welcome
- 11.00 - 11.50 Luisa Cifarelli (President of Centro Fermi and SIF), "The Enrico Fermi Centre".
Giancarlo Righini (Director of Centro Fermi), "The Fermi Museum".
- 11.50 - 12.30 Robert O'Connell (Louisiana State University),
"Hidden Momentum Forces in General Relativistic and Special Relativistic Systems".

Chairman: Richard Matzner

- 12.30 - 13.40 Lunch
- 13.40 - 14.20 Vahe Gurzadyan (Alikhanian National Laboratory),
"Dynamical systems and separation of signals".
- 14.20 - 15.00 Salvatore Capozziello (SIGRAV, INFN, Università di Napoli),
"Constraining extended gravity by Gravity Probe B and LARES".
- 15.00 - 16.00 Coffee Break
- 16.00 - 17.00 Sir Roger Penrose (Oxford University): via Skype from USA,
"Status of Conformal Cyclic Cosmology and tests of General Relativity".
- 17.00 - 17.40 Ignazio Ciufolini (Centro Fermi and Università del Salento),
"LARES mission and fundamental physics".

Chairman: Vahe Gurzadyan

Tuesday, June 16

- 9.30 - 10.10 Erricos C. Pavlis (University of Maryland, Baltimore County and NASA Goddard),
"LARES SLR data contribution to Earth science".
- 10.10 - 10.50 Rolf Koenig (Helmutz Centre Potsdam, GFZ),
"On Measuring the Frame-Dragging Effect with Geodetic Satellites".
- 10.50 - 11.20 Coffee Break

- 11.20 - 12.00 Richard Matzner & Phuc Nguyen (University of Texas at Austin),
"Analysis of thermal effects on the orbit of LARES".
- 12.00 - 12.40 Sergei Kopeikin (University of Missouri),
"Post-Newtonian theory of Earth's geoid undulation".
- 12.40 - 13.20 Angela di Virgilio (INFN Pisa),
"The GINGER project".

Chairman: Erricos C. Pavlis

13.20 - 14.30 Lunch

- 14.30 - 15.10 Gaetano Vilasi (Università di Salerno and INFN),
"Repulsive gravity of light beams".
- 15.10 - 15.50 Angelo Tartaglia (Politecnico di Torino),
"Relativistic positioning and navigation: exploiting the Sun-Earth Lagrangian points".
- 15.50 - 16.30 Paolo Bellomi / Daniele Liuzzi (Avio spa),
"Vega Launch Vehicle Evolutions: a new range of opportunity for access to space".

16.30 - 17.00 Coffee Break

- 17.00 - 17.40 Antonio Paolozzi (Scuola di Ingegneria Aerospaziale and Centro Fermi),
"Engineering of the LARES satellite".

Chairman: Rolf Koenig

20.00 - 23.00 Social Dinner

Wednesday, June 17

- 10.00 - 12.00 Archaeological visit (special underground tour in the Crypta Balbi).
Not included in the registration fee.
- 12.00 - 13.20 Round table
- 13.20 - 14.30 Lunch
- 14.30 - 16.00 Closing session