

International School of Cosmic-Ray Astrophysics
<<M.M. Shapiro>>

**22nd Course: “From Cosmic Rays to Gravitational Waves:
Now and to Come.”**

Directors: J.P. Wefel, T. Stanev, J. Hörandel
Secretary: Arthur Smith

Sunday, 31 July 2022

Note: below “Break” denotes break for coffee and discussion and posters

Chair:

09:00—09:15	Welcome & Purpose of the Course	Hörandel,
09:15—10:15	Historical Introduction: Basic Properties of Cosmic Ray	Hörandel
10:15—11:15	Ground-based Gamma-ray Astronom with Imaging Air Cherenkov Telescopes	Christian Stegmann
11:15—11:45	Break (hang Posters)	
11:45—12:45	Cosmic-ray Electrons at GeV-TeV energies and the Calorimetric Electron Telescope (CALET)	Nicholas Cannady

Chair:

15:00—16:00	Gamma Ray Astronomy with EAS arrays	Jordan Goodman
16:00 – 17:00	Magnetic-Rigidity Spectrometers: Essential tools for Cosmic-Ray research	John Mitchell
17:00—17:30	Coffee (Posters)	
17:30 – 18:30	Visit to museums, accessed from the Dirac Lecture Hall	

All the lectures take place in the Dirac Lecture Hall, San Domenico