

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

Monday, 1 August 2022

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

Chair:

09:00—10:00	Ultra high energy in the multi messenger era	Castellina
10:00—11:00	Ground-based Gamma-ray Astronomy with Imaging Air Cherenkov Telescopes	Stegmann
11:00—11:30	Break	
11:30—12:30	Radio detection of extensive air showers - Precision measurements of the properties of cosmic rays	Hörandel

Chair:

15:00—16:00	Recent results from HAWC	Goodman
16:00 – 17:00	Cosmic ray anisotropy in the TeV region	Ahlers
17:00—17:30	Break	
17:30 – 17:45	Measurement of high-energy muon bundles in air showers with IceTop and IceCube	Verpoest
17:45 – 18:00	A Combined Fit of the Diffuse Neutrino Spectrum using IceCube Muon Tracks and Cascades	Naab
18:00 – 18:15	Search for neutrinos from gamma-ray bursts	Deoskar

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