

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

**20th Course: "Particle, Gamma-ray and Neutrino Astrophysics
in the 21st Century"**

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

Tuesday, 2 August 2016

Note: below "Break" denotes break for coffee and discussion and posters

Chair: Hörandel

08:45—09:00	Welcome & Purpose of the Course	Stanev/Wefel/ Hörandel
09:00—10:00	Cosmic ray propagation in the galaxy: Abundances, energy spectra, and secondary production	Strong
10:10—11:10	Jet Sources in the extra-galactic gamma-ray sky	A. Reimer
11:15—11:45	Break (hang Posters)	
11:50—12:20	Search for new supernova remnant shells in the Galactic plane with H.E.S.S.	Capasso, Massimo
12:20—12:50	Ultra-high-energy cosmic ray propagation with CRPropa	Van Vliet, Arjen

Chair: A. Reimer

15:00—16:00	Cosmic rays up to TeV energy: A brief overview	Wefel
16:10 – 17:10	Cosmic rays at the 'knee': Summary of recent results	Hörandel
17:15—17:45	Break	
17:50 – 18:50	Ultra-high energy cosmic rays I: the delicacy of the observations, the subtlety of the analysis	Ghia

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

Day 2