

# International School of Cosmic-Ray Astrophysics

<<M.M. Shapiro>>

17<sup>th</sup> Course: Astro & Particle Physics: From Underground to Outer Space

Directors: J.P. Wefel and T. Stanev

Secretary Arthur Smith



Friday 16th July 2010

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

Chair: Holder

10:00—11:00	<b>Extreme Energy Cosmic Rays: Current State of the Art</b>	Matthews
11:00—11:30	<b>Break</b>	
11:30—12:00	<b>Denoising of signals on the sphere with a sparse expansion in wavelets</b>	Silva
12:00—12:30	<b>Constraining Magnetic Fields with UHECR's</b>	Baughman
12:30—13:00	<b>Application of TIERRAS for underground particle cascade simulations</b>	Tueros

Chair: Ferro

16:00—17:00	<b>Einstein's Equations, Cosmology, Dark Matter and Dark Energy</b>	Weiler
17:00—18:00	<b>Positrons and Electrons as Astrophysical Probes</b>	Wefel
18:00—18:30	<b>Break</b>	
18:30—19:00	<b>Cosmic Ray Composition around the knee with IceCube/ IceTop</b>	Eisch
19:00—19:30	<b>Time Dependent Searches for Neutrino point sources with IceCube</b>	Baker

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