

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

**22<sup>nd</sup> Course: “From Cosmic Rays to Gravitational Waves:  
Now and to Come”**

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

**Saturday, 6 August 2022**

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

Chair:

09:00—10:00	<b>Gravitational Waves</b>	<b>Schmidt</b>
10:00—11:00	<b>Cosmic rays at the knee and the GRAPES experiment</b>	<b>Gupta</b>
11:00—11:30	<b>Break</b>	
11:30—12:30	<b>Cosmic rays at the knee - results and implications</b>	<b>Hörandel</b>

Chair:

15:00 – 16:00	<b>Neutrino from Tidal Disruption Events</b>	<b>Reusch</b>
16:00 – 16:15	<b>Effects of complex ice models on radio neutrino simulations using a RadioPropa ray tracer</b>	<b>Oeyen</b>
16:15 –16:30	<b>Solar WIMP Search with the IceCube Neutrino Observatory</b>	<b>Lazar</b>
16:30 – 16:45	<b>Shaken, not stirred: Test particles in Binary-Black-Hole Mergers.</b>	<b>Van der Merwe</b>
16:45 – 17:00	<b>Suppression of the TeV pair-beam plasma instability by a tangled weak intergalactic magnetic field</b>	<b>Alawashra</b>
17:00—17:30	<b>Break</b>	
17:30 – 18:30	<b>The Astrophysics of Ultra-Heavy Galactic Cosmic Rays and techniques for their measurement.</b>	<b>Mitchell</b>
18:30 – 18:45	<b>Closing remarks</b>	<b>Hörandel</b>
20:00	<b>School Banquet, hotel ELIMO</b>	