



## **MULTI-MESSENGER APPROACHES TO COSMIC RAYS: ORIGINS AND SPACE FRONTIERS**

Wednesday 27th - Friday 29th November 2013

### **PROGRAMME DAY 1**

TIME	ACTIVITY
8:30	<i>Registration</i>
9:00	<i>Introduction talk</i>
	<i><b>UHECR observations and their interpretations</b></i>
9:15	Ultra high energy cosmic rays: status and future prospects -- E.-J. Ahn
10:00	UHECRs: Current status and the future prospects on anisotropies at ultra-high energies -- F. Oikonomou
10:25	<i>Coffee Break</i>
10:55	The current status of the composition measurements of UHECRs with TA -- Y. Tameda
11:20	Mass Composition with Auger and hadronic models -- T. Pierog
11:45	<i>Lunch</i>
	<i><b>Sources and acceleration</b></i>
13:45	Sources and Acceleration of Ultra-High-Energy Cosmic Rays -- S. Inoue
14:30	Acceleration and Emission in GRBs -- K. Asano
14:55	AGN Jets and Lobes: Sources of UHECRs? -- L. Stawarz
15:20	<i>Coffee break</i>
15:50	The possibilities of nuclei survival -- S. Horiuchi
16:15	Newborn pulsars as ultrahigh energy sources -- K. Fang
16:40	Particle acceleration in large-scale structure -- U. Keshet
	<i><b>Novel ideas and experiments -- I.</b></i>
17:05	How to unravel the origin of UHECRs using multi-wavelength instruments: the future -- V. Pavlidou
17:30	<i>Discussion</i>
18:30	End



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### **PROGRAMME DAY 2**

TIME	ACTIVITY
	<i>Multi-messengers: neutrinos</i>
9:00	Birth of High-Energy Neutrino Astronomy -- C. Kopper
9:45	Multi-Messenger Approaches to Cosmic Rays -- M. Ahlers
10:10	Demystifying the PeV Cascades in IceCube: Less (Energy) is More (Events) -- R. Laha
10:35	<i>Coffee Break</i>
11:05	Neutrinos from GRBs and hypernova remnants -- X.Y. Wang
11:30	Future Prospects for Neutrino Astronomy -- C. Finley
11:55	<i>Lunch</i>
	<i>Multi-messengers: gamma rays</i>
13:55	Multi-messengers: gamma rays -- A. Taylor
14:40	Gamma rays from cosmologically distant sources of UHECR -- A. Prosekin
15:05	Fermi and H.E.S.S. results on Galactic sources, and their link to cosmic rays -- M.-H. Grondin
15:30	<i>Coffee break</i>
16:00	The VHE extra-galactic sky and UHECRs -- M. Cerruti
16:25	Centaurus A -- Y. Becherini
16:50	<i>Discussion</i>
17:50	<i>End</i>
19:00	<i>Visit of Musée d'Orsay</i>
20:30	<i>Dinner at Musée d'Orsay</i>



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### **PROGRAMME DAY 3**

TIME	ACTIVITY
	<i>Messengers from below the knee to the ankle</i>
9:00	Galactic cosmic rays -- S. Gabici
9:45	Hybrid simulations of ion acceleration at non-relativistic shocks -- D. Caprioli
10:10	<i>Coffee Break</i>
10:40	Proton and helium anomalies -- T. Delahaye
11:05	Cosmic Ray Propagation in the Interstellar Medium -- G. Giacinti
	<i>Novel ideas and experiments -- II.</i>
11:30	Gamma-ray signatures from UHECRs -- A. Zech
11:55	Probing intergalactic magnetic fields with SKA -- K. Takahashi
12:20	<i>Lunch</i>
	<i>Novel ideas and experiments -- III.</i>
14:00	The JEM-EUSO mission -- A. Guzman
14:25	Isotropic Microwave Emission from Extensive Air Showers -- C. Williams
14:50	Upgrades of the Pierre Auger Fluorescence detector -- M. Bohacova
15:15	Radio detection and upgrades for the Pierre Auger Observatory -- I. C. Maris
15:40	TREND and cosmic neutrino radio detection -- O. Martineau-Huynh
16:05	<i>Short break</i>
16:10	<i>Discussion &amp; concluding remarks</i>
17:10	<i>Wine &amp; cheese</i>
18:10	<i>End</i>