



# CRPropa Workshop 2023

## Monday 25 September 2023

### Scientific Session (09:00 - 10:30)

time	[id] title	presenter
09:00	[19] Introduction Talk	DÖRNER, Julien MERTEN, Lukas
09:30	[1] CRPropa simulations for anisotropy studies	ROSSONI, Simone
10:00	[13] Impact of a $\Lambda$ CDM extension on UHECR propagation	MEINERT, Janning

### Scientific Session (11:00 - 12:30)

time	[id] title	presenter
11:00	[3] Normalizing Flows for Parameter Estimation of UHECR Sources with Surface Detector Data of the Pierre Auger Observatory	KRIEGER, Frederik
11:30	[12] Population studies of UHECR sources	EHLERT, Domenik
12:00	[14] Combined fit of UHECRs with jetted AGN	PLOTKO, Pavlo

### Scientific Session (14:30 - 15:00)

time	[id] title	presenter
14:30	[24] Towards SimProp-Sirente: the new release of the SimProp code	EVOLI, Carmelo

### Scientific Session (16:00 - 17:00)

time	[id] title	presenter
16:00	[8] Hadronic Interactions in CRPropa	DÖRNER, Julien
16:30	[9] Simulating UHECR sources with CRPropa using updated interaction modules	MOREJON, Leonel

# Tuesday 26 September 2023

## Scientific Session (09:00 - 10:30)

time	[id] title	presenter
09:00	[18] Time dependent particle injection to investigate the local source behaviour of flaring AGN	Mr SCHLEGEL, Leander
09:30	[20] Synchrotron radiation in CRPropa	ARAVINTHAN, Athithya HELLRUNG, Jonas DÖRNER, Julien MERTEN, Lukas
10:00	[2] On numerical Simulations of Intergalactic Electromagnetic Cascades with Lorentz Invariance Violation Using CRPropa	SAVELIEV, Andrey

## Scientific Session (11:00 - 12:00)

time	[id] title	presenter
11:00	[6] Coupling axion-like particles to photons during propagation: the ALPinist plug-in	ALVES BATISTA, Rafael
11:30	[7] Characterisation of gamma-ray propagation in our Galaxy	DI MARCO, Gaetano

## Scientific Session (14:00 - 15:30)

time	[id] title	presenter
14:00	[21] Probing the intergalactic magnetic field through gamma-ray observations	DA VELA, Paolo
15:00	[16] Very-high-energy gamma ray propagation with CRPropa, CRbeam and ELMAG	KOROCHKIN, Alexander

## Scientific Session (16:00 - 17:00)

time	[id] title	presenter
16:00	[10] Influence of plasma instabilities on the propagation and spectrum of extragalactic electromagnetic cascades	ESPINOSA CASTRO, Luis Enrique
16:30	[11] Local Source Physics with CRPropa - Extending Test Particle Simulations for Modelling Leptohadronic AGN Jets	SCHROLLER, Marcel

# Wednesday 27 September 2023

## Scientific Session (09:00 - 10:30)

time	[id] title	presenter
09:00	[5] Ensemble Averaged Transport with CRPropa	MERTEN, Lukas
09:30	[23] Diffusion of Energetic Particles in Turbulent Magnetic Fields	FICHTNER, Horst
10:00	[22] Investigating Charged Particle Transport in Non-Gaussian Magnetic Turbulence Models	EFFENBERGER, Frederic

## Scientific Session (11:00 - 12:00)

time	[id] title	presenter
11:00	[15] The Galactic diffuse gamma-ray and neutrino emission at the PeV frontier	DE LA TORRE LUQUE, Pedro
11:30	[4] Modeling Superdiffusive Particle Transport with CRPropa3.2	AERDKER, Sophie

## Scientific Session (14:00 - 14:45)

time	[id] title	presenter
14:00	[17] The IMAGINE magnetic field library	HUTSCHENREUTER, Sebastian