



# Swiss SKA Days 2022

## Tuesday, 4 October 2022

### Tuesday Afternoon: Data Science & Imaging - Aula Polivalente (13:00 - 15:10)

-Conveners: Emma Tolley

time	[id] title	presenter
13:00	[104] Data Science & Simulations Program Overview	FELIX, Simon
13:10	[98] Karabo Pipeline - The SKA Digital Twin	FELIX, Simon DR. ROHIT SHARMA
13:30	[113] Radio Astronomical Data Processing with GPU using DASK-cudF	Dr DAS, Arpan
13:40	[80] Fast, Scalable and Accurate Wide-Field Radio Interferometry Gridding and Degriding via the NUFFT	SIMEONI, Matthieu
13:50	[103] A Polyatomic Frank-Wolfe algorithm for source deconvolution with sparsity priors: application to simulated data with RASCIL	JARRET, Adrian
14:00	[111] Bluebild: A Next Generation Radio Interferometric Imager applied to Solar Observations	KRISHNA, Shreyam
14:10	[89] Challenging radio-astronomy imaging: a direct source localization from uv-plane observations	TARAN, Olga
14:20	[77] Image reconstruction algorithms in radio interferometry: from handcrafted to learned regularization denoisers	Prof. WIAUX, Yves
14:30	[116] A fast and accurate method to generate 3D 21cm maps from cosmic dawn to reionisation.	SCHAEFFER, Timothée

### Tuesday Afternoon: Data Science & Deep Learning - Aula Polivalente (15:25 - 16:20)

-Conveners: Emma Tolley

time	[id] title	presenter
15:25	[71] Deep Learning approach for HI regions identification and 21-cm signal recovery from SKA-Low observations	Dr BIANCO, Michele
15:35	[85] EMBER: emulating HI from dark matter-only simulations	BERNARDINI, Mauro
15:45	[92] Accelerating radiative transfer simulations with physics-informed neural networks	KORBER, Damien
15:55	[72] 21cm foreground subtraction with machine learning	CHEN, Tianyue
16:05	[128] Delensing Gravitational Lensing Effects with Physics-Informed Neural Networks	TAJJA, Ayoub

### Tuesday Afternoon: Closing remarks - Aula Polivalente (16:20 - 16:30)