## **Photorefractive Photonics and Beyond**

## Tuesday, 6 September 2022

## Signal processing and photonics: (session chair: prof. Germano Montemezzani) (09:30 - 10:55)

time	[id] title	presenter
09:30	[44] Learning in Holographic Convolutional Neural Nets	WAGNER, Kelvin
	[14] Neural networking and machine learning based on photorefractive solitonic waveguides: novel all-plastic Photonic Artificial Intelligence	FAZIO, Eugenio
10:30	[47] Programming Nonlinear Optical Propagation as an Optical Computer	Mr OGUZ, Ilker

## Signal processing and photonics: (session chair: prof. Ady Arie) (11:15 - 13:05)

time	[id] title	presenter
	[70] Optical signal detection beyond the quantum limit: a case study from gravitational astronomy	Dr LEONARDI, Matteo
	[13] Addressable and erasable photonic neurons using solitonic X-junctions in lithium niobate films	BILE, Alessandro
12:15	[43] All-optical switching on plasmonic-lithium niobate metasurfaces	Dr KARVOUNIS, Artemios
12:40	[15] Photorefractive soliton synapsis for Surface-Plasmon-Polariton circuits	TARI, Hamed