



University of Pavia

Ph.D. School of Electrical and Electronics Engineering and Computer Science

SHORT COURSE

Radar Remote Sensing, polarimetry and scattering mechanisms

Prof. Dara Entekhabi

Massachusetts Institute of Technology – MIT (USA)

Date	Tue 22 nd May	Tue 22	Thu 24	Fri 25	Fri 25	Thu 31	Fri 1 st June
Time (24h)	11-13	16-18	16-18	9-11	14-16	14-16	9-12
Room	Seminar room, electronics	E4	Seminar room, electronics	Seminar room, comp. science	Seminar room, electronics	EF2	Seminar room, comp. science

Polo Didattico Ingegneria
Università degli Studi di Pavia – Via Ferrata, 5 – Pavia

Abstract: The course will expose doctoral candidates to an important set of tools for monitoring large-scale Earth phenomena and the associated risk; the lectures will include different aspects of remote sensing, from the physics of electromagnetic interaction, to data production and processing, all the way to final applications. The attendees will find the treated topics relevant to pressing societal issues, in that it is linked to countermeasures to climate change and consequent environmental challenges, especially weather-related. From a technical perspective, all attendees will probably find familiar topics in at least some parts of the course, regardless of their specific engineering background, because of the wide range of levels and aspects on which the issue is treated, from physics to information handling.

Bio: Dara Entekhabi obtained his PhD from the Department of Civil Engineering at the Massachusetts Institute of Technology (MIT) in 1990. He is currently Professor in the Department of Civil and Environmental Engineering and the Department of Earth, Atmospheric and Planetary Sciences at MIT. His research spans a variety of topics in hydrology, including land-atmosphere interactions, surface water - groundwater interactions, data assimilation, and remote sensing. In 2015, he was named Fellow of the Institute of Electrical and Electronics Engineers (IEEE) for contributions to microwave remote sensing of soil moisture. In 2017, he was elected as a member of National Academy of Engineering for leadership in the hydrologic sciences including the scientific underpinnings for satellite observation of the Earth's water cycle.

Organizer

Prof. Fabio Dell'Acqua

Ph.D. Coordinator

Prof. P. Di Barba