Aula Riunioni- DII, via G. Caruso 16, Pisa
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LOCALIZATION OF THINGS

The availability of positional information is essential for numerous wireless applications including crowdsensing, autonomous driving, and Internet-of-Things. The coming years will see the emergence of location-aware networks with sub-meter localization accuracy even in GNSS-challenged environments. This calls for Localization-of-Things (LoT), a new paradigm that refers to locating, tracking, and navigating collaborative or non-collaborative nodes (sensors, vehicles, and objects). Our work relies on statistics, optimization, and communication theory, and it approaches LoT from different perspectives: theoretical framework, cooperative algorithms, network operations, and network experimentation. This talk will give an overview of LoT and provide our recent research results in this exciting field.

About the speaker

Moe Win is a Professor at the Massachusetts Institute of Technology (MIT) and the founding director of the Wireless Information and Network Sciences Laboratory. Prior to joining MIT, he was with AT&T Research Laboratories and NASA Jet Propulsion Laboratory. His research encompasses fundamental theories, algorithm design, and network experimentation for a broad range of real-world problems. His current research topics include network localization and navigation, network interference exploitation, and quantum information science.

Professor Win is a Fellow of the AAAS, the IEEE, and the IET. He has served the IEEE Communications Society as an elected Member-at-Large on the Board of Governors, as elected Chair of the Radio Communications Committee, and as an IEEE Distinguished Lecturer. He was honored with two IEEE Technical Field Awards: the IEEE Kiyo Tomiyasu Award and the IEEE Eric E. Sumner Award (jointly with Professor R. A. Scholtz). Together with students and colleagues, his papers have received several awards. Other recognitions include the IEEE Communications Society Edwin H. Armstrong Achievement Award, the International Prize for Communications Cristoforo Colombo, the Copernicus Fellowship and the Laurea Honoris Causa from the Università degli Studi di Ferrara, and the U.S. Presidential Early Career Award for Scientists and Engineers. He is an ISI Highly Cited Researcher.