BHARTI SCHOOL OF TELECOMMUNICATION TECHNOLOGY AND MANAGEMENT, IIT DELHI

Bharti Lecture

Date: December 12th, 2019

Venue: Bharti School of Telecommunication Technology and Management, Seminar Hall IIA 501, Fourth Floor, IIT Delhi
Timing: 3.30pm – 4.30pm

"Key drivers and research challenges for 6G"

by

Prof. Matti Latva- aho,
Director for 6G Flagship, University of Oulu, Finland

Speaker's Profile

Matti Latva-aho received the M.Sc., Lic.Tech. and Dr. Tech (Hons.) degrees in Electrical Engineering from the University of Oulu, Finland in 1992, 1996 and 1998, respectively. From 1992 to 1993, he was a Research Engineer at Nokia Mobile Phones, Oulu, Finland after which he joined Centre for Wireless Communications (CWC) at the University of Oulu. Prof. Latva-aho was Director of CWC during the years 1998-2006 and Head of Department for Communication Engineering until August 2014. Currently he serves as Academy of Finland Professor in 2017 – 2022 and is Director for National 6G Flagship Programme for 2018 - 2026. His research interests are related to mobile broadband communication systems and currently his group focuses on beyond 5G systems research. Prof. Latva-aho has published close to 500 conference or journal papers in the field of wireless communications. He received Nokia Foundation Award in 2015 for his achievements in mobile communications research.

Abstract

As 5G research is maturing towards a global standard, the research community must focus on the development of beyond-5G solutions and 2030 era, i.e. 6G. It is not clear yet what 6G will entail. It will include relevant technologies considered too immature for 5G or which are outside the defined scope of 5G. More specifically, the way in which data are collected, processed, transmitted and consumed within the wireless network will be a key driver for 6G. It is also envisioned that we need new KPI drivers towards 6G besides the current 5G technical superiority KPIs: societal megatrends, UN sustainability goals, emerging new technical enablers as well as ever increasing productivity demands are emerging critical drivers towards 2030 solutions. To summarize, 6G is not only about moving bits: it will become a framework of services, including communication service where all user specific computation and intelligence may move to edge cloud. Integration of sensing, imaging and highly accurate positioning capabilities with mobility opens a myriad of new applications in 6G era.

About Lecture Series

This lecture series is being held with the objective of providing students of Bharti School an environment to learn from the leaders, insight into the best practices of the industry as well as an opportunity to interact with telecom leaders.

Note: We look forward to your participation. Please be seated by 3:15 PM.