

Organized by Prof. Aditya K. Jagannatham, EE Department, IIT Kanpur
P1: Massive MIMO, P2: mmWave MIMO, P3: Cooperative/NOMA

High Intensity Training (HIT)
Programs on 5G Wireless
Technologies



Important Dates

Course Dates

P1: 25th to 27th Sep

P2: 2nd to 4th Oct

P3: 9th to 11th Oct

Last Date for Registration

P1: 12th Sep

P2: 19th Sep

P3: 26th Sep

Venue

To be conducted online via
Zoom

Contact

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Introduction

Welcome to these 3-day **High Intensity Training (HIT)** programs on **Multi-user massive MIMO, mmWave MIMO/ OFDM and Cooperative/ NOMA** technologies, which form the pillars of 5G. Together these can achieve the central goals of 5G: Enhanced Mobile Broadband (eMBB ~ 10 Gbps), Ultra-Reliable and Low Latency Communication (URLLC < 1 ms) and Massive Machine-Type Communications (mMTC ~ 1M devices/ Sq km). Each program will be held in a Friday + Weekend format to make it especially convenient for students, faculty and working professionals to attend. Candidates can choose to attend *individual or bundled programs* depending on the technologies they would like to focus. Each program is self-contained and includes intense lecture sessions, tutorial problem solving, and hands-on MATLAB training modules. Expert guest lectures will also be delivered by eminent speakers from industry and academia.

About the Trainer



Prof. Aditya K. Jagannatham is a Professor in the Electrical Engineering department at IIT Kanpur, where he holds the Arun Kumar Chair Professorship, and is a well known expert and trainer on 5G technologies. He received his Bachelors degree from the Indian Institute of Technology, Bombay and M.S. and Ph.D. degrees from the University of California, San Diego, U.S.A. From April '07 to May '09 he was employed as a senior wireless systems engineer at Qualcomm Inc., San Diego, California, where he was a part of the Qualcomm CDMA technologies (QCT) division. His research interests are in the area of next-generation wireless networks, with special emphasis on various 5G technologies such as massive MIMO, mmWave MIMO, FBMC, NOMA, Full Duplex and others. He has published extensively in leading international journals and conferences. He has been recognized with several awards including the CAL(IT)2 fellowship at the University of California San Diego, Upendra Patel Achievement Award at Qualcomm, P.K. Kelkar Young Faculty Research Fellowship, Qualcomm Innovation Fellowship (QInF), Arun Kumar Chair and the IITK Excellence in Teaching Award.

Target Audience

- Ph.D. scholars pursuing research in 5G technologies
- M.Tech/ B.Tech students undertaking thesis/ projects in 5G technology
- Faculty members of Engineering Institutions/ Universities
- Engineers from Wireless Industry and R&D Organizations

For more details and registration information, visit the website
<http://www.iitk.ac.in/mwn/5GHIT/>