

IIITB COMET Foundation Public Outreach:

IIITB COMET Foundation has initiated the following activities as part of public outreach and skill development:

1. IIITB COMET Foundation Thought Leadership Series on Advanced Communication Systems:

This initiative aims to bring in thought leaders in areas related to Advanced Communication Systems to share their views on the future of communication networks and related aspects. Thus far, we have had one talk in this series (details in table below).

Date	Title of talk	Speaker(s)
March 25, 2022	Indigenous 5G Technology Development	Prof. Kiran Kuchi (Dean R&D, IIT Hyderabad)

2. IIITB COMET Foundation Workshop Series on Advanced Communication Systems:

This initiative aims to upskill human resources in the areas of Advanced Communication Systems. We reach out to students from engineering institutions across India, and to the industry, inviting them to partake in virtual one-day workshops. We have successfully conducted three such workshops (details below; flyers in Appendix A)

Date	Title of workshop	Speaker(s)
March 26, 2022	5G-NR PHY Layer: Modeling, Technologies, and Standards	Dr. Prem Singh (IIITB) Dr. Ekant Sharma (IIT Roorkee)
May 21, 2022	Intelligent Reflecting Surfaces: Fundamentals and Applications	Dr. Rajarshi Mahapatra (IIIT NR) Dr. Priyanka Das (IIITB)
July 30, 2022	Radar Sensing: Fundamentals and Recent Advances	Dr. Vinod Reddy (IIITB) Mr. Vinay Kulkarni (Ignitarium)
December 17, 2022	Overview of Layer 2 & Layer 3 Protocols and Algorithms for Open-RAN based 5G Base Station	Dr. Saptarshi Chaudhuri (Head of the Radio Access Network System Engineering and L1 Department of Radisys Corporation)

3. Public lecture series in collaboration with IIITB's Samvaad initiative, on the theme of "5G Verticals and Roll Out"

We partnered with IIITB's Samvaad initiative, with the aim to educate the public on recent happenings in areas related to 5G and wireless communications. These talks were live streamed to the public via YouTube. We had five talks, details of which are included below.

Date	Title of talk	Speaker(s)
June 06, 2022	Mobile Edge Computing and it's Standardization Aspects	Prof. Arzad Alam Kherani (IIT Bhilai)
June 13, 2022	Latest Advances in mmWave MIMO and Massive MIMO	Prof. Aditya Jagannatham (IIT Kanpur)
June 20, 2022	AI for Wireless Communications	Dr. Anand Mukhopadhyay & Dr. Praful Pai (MathWorks)
June 27, 2022	Beam Management in 5G: A Stochastic Geometry Analysis	Dr. Sanket Kalamkar (Qualcomm, San Diego, USA)
July 04, 2022	O-RAN Standards and it's Implementation Aspects	Dr. Sai Dhiraj Amuru (WiSig Networks)

Appendix A

Flyers for IIITB COMET Foundation Workshop Series on Advanced Communication Systems

1.



The flyer is for a workshop series on advanced communication systems, specifically focusing on 5G-NR physical layer modeling, technologies, and standards. It features a central graphic of a city skyline at night with a large, glowing '5G' logo overlaid. The IIITB COMET Foundation logo is at the top. The event is scheduled for March 26, 2022, at 09:30 am via Zoom. Two speakers are listed: Dr. Prem Singh from IIIT Bangalore and Dr. Ekant Sharma from IIT Roorkee. A QR code is provided for registration details, and the contact information for the foundation is at the bottom right.

IIITB COMET
FOUNDATION

WORKSHOP SERIES ON
Advanced Communication Systems

5G

ONE DAY WORKSHOP ON
5G-NR PHYSICAL LAYER
Modeling, Technologies & Standards

March 26, 2022 | 09:30 am via  Zoom

DR. PREM SINGH
IIIT Bangalore

DR. EKANT SHARMA
IIT Roorkee

REGISTER NOW >>


SCAN FOR MORE DETAILS

* Registration mandatory
* Registered participants will receive participation certificates

For more details & free registration visit :
comet.iiitb.ac.in/workshop-5g-nr

Contact us: workshop.comet@iiitb.ac.in

IIITB COMET Foundation
(A Section 8 Company)
Ramanujan block, IIIT Bangalore,
26/C, Electronics City,
Bangalore – 560 100

2.



IIITB COMET
FOUNDATION

WORKSHOP SERIES ON
Advanced Communication Systems

INTELLIGENT REFLECTING SURFACES

FUNDAMENTALS & APPLICATIONS

DATE: 21-05-2022, SATURDAY



SPEAKER
DR. RAJARSHI MAHAPATRA
Dr. SPM IIIT Naya Raipur

SESSION 1: 10:00 TO 11:30

- Introduction to 5G & Beyond
- IRS channel modeling

SESSION 3: 14:00 TO 15:00

- Comparison with existing technologies
- Academic and industry initiatives



SPEAKER
DR. PRIYANKA DAS
IIIT Bangalore

SESSION 2: 11:45 TO 13:15

- Applications of IRS in wireless communications
 - Coverage extension, Physical layer security, Cognitive radio, UAV

SESSION 4: 15:15 TO 16:15

- Major Challenges
 - Joint active and passive beamforming
 - Channel estimation
 - IRS deployment
 - Future research directions

REGISTER NOW >>



SCAN TO REGISTER


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For more details & free registration visit :
comet.iiitb.ac.in/workshop-5g-irs

Contact us: workshop.comet@iiitb.ac.in

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3.




WORKSHOP SERIES ON
Advanced Communication Systems

ONE DAY WORKSHOP ON


RADAR SENSING:
FUNDAMENTALS AND RECENT ADVANCES

July 30, 2022 | 09:30 am via  Zoom

SPEAKERS




DR. VINOD VEERA REDDY
IIIT Bangalore



MR. VINAY KULKARNI
Ignitarium Technology Solutions

REGISTER NOW >>



SCAN TO REGISTER

- * Registration mandatory
- * Registered participants will receive participation certificates

For more details & free registration visit :
comet.iiitb.ac.in/workshop-radar

Contact us: workshop.comet@iiitb.ac.in

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4.

IIITB COMET
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WORKSHOP SERIES ON
Advanced Communication Systems

A central graphic featuring a large, glowing blue '5G' text. Above the '5G' is a blue Wi-Fi symbol. The '5G' is surrounded by several blue square icons, each containing a white geometric pattern (a triangle and a square). These icons are connected by thin blue lines, forming a network-like structure. The background is a dark blue gradient with subtle geometric patterns.

ONE DAY WORKSHOP ON
**Layer 2 & Layer 3 Protocols
and Algorithms for Open-RAN based
5G Base Station**

Saturday, December 17, 2022 | 09:30 am via  Zoom

SPEAKER

A portrait of Dr. Saptarshi Chaudhuri, a man with dark hair, glasses, and a mustache, wearing a dark blue shirt.

DR. SAPTARSHI CHAUDHURI
Head, RAN System Engineering
and L1 Department, Radisys Corporation

REGISTER NOW >>

* Registration mandatory
* Registered participants will receive participation certificates

For more details & free registration visit :
comet.iiitb.ac.in/workshop-layers2and3

Contact us: workshop.comet@iiitb.ac.in

A square QR code with a black and white pixelated pattern.

SCAN TO REGISTER

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