

# HyWIT 2018: Hyderabad Workshop on Information Theory

15<sup>th</sup> and 22<sup>nd</sup> Sept 2018 at IIIT Hyderabad  
16<sup>th</sup> and 23<sup>rd</sup> Sept 2018 at IIT Hyderabad

- HyWIT is a workshop series on coding and information theory, communications and signal processing conducted by IIIT Hyderabad, IIT Hyderabad and the Joint Chapter of Communications Society & Signal Processing Society of IEEE Hyderabad Section.
- The 2018 edition of HyWIT focuses primarily on **Next Generation Wireless Systems**.
- The workshop will deal with contemporary aspects of next generation wireless systems including front-end design of receivers, feedback, base-station side estimation, 5G new radio, massive MIMO systems and content delivery in wireless networks.

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A chapter driven initiative of

IEEE  
Signal Processing Society

Web Site

<http://spsrc.iiit.ac.in/hywit2018/>

# HyWIT 2018 Program

Workshop Topic	Speaker	Date and Time	Venue
Inaugural Address	Dr. Manish Kothari Qualcomm	15 <sup>th</sup> Sep (Saturday) 9:30AM – 10:30AM	IIIT Hyderabad
Basics of OFDM and its Detection	Dr. Sachin Chaudhari IIIT Hyderabad	15 <sup>th</sup> Sep (Saturday) 11:00AM – 1:00PM	IIIT Hyderabad
Digital Front End Design in Digital Transceivers	Dr Dhananjaya Ponukumati Qualcomm	15 <sup>th</sup> Sep (Saturday) 2:00PM – 5:00PM	IIIT Hyderabad
KEY NOTE: Reduced Feedback Schemes and Base Station-Side Estimation Techniques for 4G/5G Cellular Systems	Prof. Neelesh Mehta IISc Bangalore	16 <sup>th</sup> Sep (Sunday) 9:30AM – 12:30PM	IIT Hyderabad
A Signal Processing Perspective on Unsupervised Graph Learning	Dr. Aditya Siripuram IIT Hyderabad	16 <sup>th</sup> Sep (Sunday) 2:00PM – 5:00PM	IIT Hyderabad
5G New Radio	Prof. Kiran Kuchi IIT Hyderabad	22 <sup>nd</sup> Sep (Saturday) 9:30AM – 12:30PM	IIIT Hyderabad
Content Caching and Delivery in Heterogenous Wireless Networks	Dr. Nikhil Karamchandani IIT Bombay	22 <sup>nd</sup> Sep (Saturday) 2:00PM – 5:00PM	IIIT Hyderabad
Wireless MIMO Communications	Dr. Lakshmi Natarajan IIT Hyderabad	23 <sup>rd</sup> Sep (Sunday) 9:30AM – 12:30PM	IIT Hyderabad
Massive MIMO: Opportunities and Challenges	Dr. Lakshmi Narasimhan IIT Palakkad	23 <sup>rd</sup> Sep (Sunday) 2:00PM – 5:00PM	IIT Hyderabad


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# Registration

## Register online:

<https://in.explara.com/e/hywit-2018--workshop-series-on-5g-wireless-communications>

- The workshop is open to all. Registration is mandatory for everyone
- Participation certificates will be awarded
- Lunch and tea are included in the registration
- Please make your own transportation arrangements
- Limited accommodation for outstation participants can be made available on extra payment

  
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## Registration Fees

IEEE Student Members, IIIT-H and IIT-H Students	Rs 1000
Other Students	Rs 1500
IEEE Members	Rs 2000
IEEE Non members	Rs 4000

## Lunch and Tea Breaks

- Lunch on all the days from 12:30PM to 2:00PM
- Tea breaks of 30 minutes on all the days at 10:45AM and 3:15PM

# Organizing Committee

Lalitha Vadlamani, IIIT Hyderabad

Sanjeev Nimishakavi, IEEE Hyderabad

Abhinav Kumar, IIT Hyderabad

G. V. V. Sharma, IIT Hyderabad

Prasad Krishnan, IIIT Hyderabad

Lakshmi Natarajan, IIT Hyderabad

## Contact

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**Department: Electronics and Telematics Engineering**

**2018-19**

**REPORT**

**FDP on "HyWIT 2018: Hyderabad Workshop on Information Theory"**

**Date of program: 15th and 22nd Sept 2018 at IIIT Hyderabad, 16th and 23<sup>rd</sup> IIT Hyderabad**

**Resource person: Dr. Manish Kothari, Qualcomm, Dr. Sachin Chaudhari, IIIT Hyderabad, Dr. Dhananjaya Ponukumati, Qualcomm, Prof. Neelesh Mehta, Dr. Aditya Siripuram, IIT Hyderabad, Prof. Kiran Kuchi, Dr. Nikhil Karamchandani, IIT Bombay**

**About the Program: HyWIT is a workshop series on coding and information theory, communications and signal processing conducted by IIIT Hyderabad, IIT Hyderabad and the Joint Chapter of Communications Society & Signal Processing Society of IEEE Hyderabad Section.**

**The workshop will deal with contemporary aspects of next generation wireless systems including front-end design of receivers, feedback, base-station side estimation, 5G new radio, massive MIMO systems and content delivery in wireless networks. The topics covered in this FDP are:**

**Day 1: Basics of OFDM and its Detection, Digital Front End Design in Digital Transceivers.**

**Day 2: KEY NOTE: Reduced Feedback Schemes and Base Station-Side Estimation Techniques for 4G/5G Cellular System, A Signal Processing Perspective on Unsupervised Graph Learning**

**Day 3: 5G New Radio, Content Caching and Delivery in Heterogenous Wireless Networks**

**Day 4: Wireless MIMO Communications, Massive MIMO: Opportunities and Challenges**

**Conclusion: The FDP on HYWIT 2018 Hyderabad Workshop on Information Theory proved to be a valuable platform for educators to enhance their expertise in these rapidly evolving domains. The acquired knowledge equips participants to not only incorporate these technologies into their teaching curriculum but also contribute to advancements wireless communication.**

**M.vijayalakshmi**

**Assistant professor**

**ETE Dept**

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