


# HyWIT 2019: Hyderabad Workshop on Information Theory


7<sup>th</sup> and 8<sup>th</sup> Sept 2019 at IIT Hyderabad  
14<sup>th</sup> and 15<sup>th</sup> Sept 2019 at IIIT Hyderabad

Website: <https://spsrc.iiit.ac.in/hywit2019/>

- HyWIT is a workshop series on coding and information theory, communications and signal processing conducted by the **Joint Chapter of Communications & Signal Processing Society of IEEE Hyderabad Section, IIIT Hyderabad and IIT Hyderabad**.
- The 2019 edition of HyWIT focuses primarily on **Sparse Signal Processing and Applications**.
- The workshop will deal with contemporary aspects of sparse signal processing and applications including greedy pursuit algorithms and non-convex methods for sparse recovery, sparse arrays for DOA estimation, sparse representations, location unaware spatial field sensing and signal processing for IoT edge intelligence.

  
PRINCIPAL  
G. Narayanamma Institute of  
Technology & Science (for women)  
(AUTONOMOUS)  
Shaikpet, Hyderabad - 500 104

Workshop Topic	Speaker	Date and Time	Venue
Compressive sensing and sparse arrays for DOA estimation	Dr. Santosh Nannuru IIIT Hyderabad	7 <sup>th</sup> Sep (Saturday) 10:00AM – 1:00PM	IIT Hyderabad
Location Unaware Spatial Field Sensing	Prof. Animesh Kumar IIT Bombay	7 <sup>th</sup> Sep (Saturday) 2:30PM – 5:30PM	IIT Hyderabad
Sparse Representations and Sampling	Dr. Aditya Siripuram IIT Hyderabad	8 <sup>th</sup> Sep (Sunday) 10:00AM – 1:00PM	IIT Hyderabad
Poster Session by Students from IIIT Hyderabad and IIT Hyderabad		8 <sup>th</sup> Sep (Sunday) 2:30PM – 4:30PM	IIT Hyderabad
Bayesian-Inspired Non-Convex Methods for Sparse Signal Recovery	Prof. Chandra Murthy IISc Bangalore	14 <sup>th</sup> Sep (Saturday) 9:30AM – 12:30PM	IIIT Hyderabad
Signal Processing for IoT Edge Intelligence	N. Venkatesh Redpine Signals	14 <sup>th</sup> Sep (Saturday) 2:00PM – 5:00PM	IIIT Hyderabad
KEYNOTE: Greedy pursuit algorithms for Sparse Signal Processing	Prof. K.V.S. Hari IISc Bangalore	15 <sup>th</sup> Sep (Sunday) 9:30AM – 12:30PM	IIIT Hyderabad

  
 PRINCIPAL  
 G. Narayanamma Institute of  
 Technology & Science (for women)  
 (AUTONOMOUS)  
 Shaikpet, Hyderabad - 500 104

# Registration


## Register Online:

<https://in.explara.com/e/hywit-2019--workshop-series-on-sparse-signal-processing-and-applications>

- 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

## Registration Fees

IEEE Student Members, IIIT-H and IIT-H Students	Rs 1200
Other Students	Rs 1700
IEEE Members	Rs 2500
IEEE Non members	Rs 4000

  
PRINCIPAL  
G. Narayanamma Institute of  
Technology & Science (for women)  
(AUTONOMOUS)  
Shaikpet, Hyderabad - 500 104

# Organizing Committee

Lalitha Vadlamani, IIIT Hyderabad

Sanjeev Nimishakavi, IEEE Hyderabad

Lakshmi Natarajan, IIT Hyderabad

Prasad Krishnan, IIIT Hyderabad

G. V. V. Sharma, IIT Hyderabad

Abhinav Kumar, IIT Hyderabad

## Contact

[lalitha.v@iiit.ac.in](mailto:lalitha.v@iiit.ac.in)

[sanjeevrn@yahoo.com](mailto:sanjeevrn@yahoo.com)



PRINCIPAL  
G. Vardhaman Institute of  
Technology & Science (for Women)  
(AUTONOMOUS)  
Shaikpet, Hyderabad - 500 104





**G.NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE (For Women)**  
**(AUTONOMOUS)**  
**Shaikpet, Hyderabad – 500104**

Department: Electronics and Telematics Engineering

2019-20

REPORT

FDP on “HYWIT-2019 – Workshop series on Sparse signal processing and applications”

Date of program: 7th and 8th Sept 2019 at IIT Hyderabad

14th and 15th Sept 2019 at IIIT Hyderabad

Resource person: Dr. Santosh Nannuru, IIT Hyderabad, Prof. Animesh Kumar, IIT Bombay, Dr. Aditya Siripuram, IIT Hyderabad, IIT Hyderabad, N. Venkatesh, Prof. K.V.S. Hari, IISc Bangalore

About the Program: The workshop will deal with contemporary aspects of sparse signal processing and applications including greedy pursuit algorithms and non-convex methods for sparse recovery, sparse arrays for DOA estimation, sparse representations, location unaware spatial field sensing and signal processing for IoT edge intelligence.

The workshop series comprised a series of sessions, keynote presentations, hands-on tutorials, and interactive discussions. The sessions were organized around the following key themes:

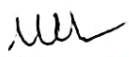
Basics of Sparse Signal Processing: Introduction to sparsity, compressive sensing, and sparse signal reconstruction.

Advanced Algorithms: Exploration of state-of-the-art algorithms for sparse signal processing.


Applications in Image and Signal Processing: Practical applications of sparse signal processing in image and signal reconstruction.

Sparse Signal Processing in Machine Learning: Integration of sparse signal processing techniques into machine learning frameworks

The HYWIT-2019 Workshop Series on Sparse Signal Processing and Applications proved to be a valuable platform for knowledge dissemination, collaboration, and skill development.

  
M.vijayalakshmi

Assistant professor

  
**PRINCIPAL**  
G. Narayanamma Institute of  
Technology & Science (for women)  
(AUTONOMOUS)  
Shaikpet, Hyderabad - 500 104