Report on The Expert Lecture

by Prof. P. K. Sahu, BITS Pillani-Hydrabad Campus, Hydrabad

on the subject Linear Systems and Gaussian Algorithms

Sponsored by Center of Excellence in Signal and Image Processing, SGGSIE&T, Nanded

Department of Mathematics organized an Expert talk by Prof P. K. Sahu, BITS Pillani-Hydrabad Campus Hydrabad on 26 December 2020.



The event was sponsored by Center of Excellence in Signal and Image Processing (CoE-SIP) of SGGSIE&T, Nanded under the head Expert talks.

The title of the talk was *Linear Systems and Gaussian Algorithms*.

Prof P. K. Sahu started his lecture with the various examples such as dealing with the time table of the institute as a linear system, electric circuit problems, and other network systems and explained elegantly how linear systems arises in our regular life. Then he explained the algorithm developed by Gauss in the 16th century and later various versions of the algorithm were reproduced by many mathematicians that include Jordan, Von Newmann, etc. He discussed all the situations in two dimensional as well as three dimensional case and explained how one can extend the situation in n dimensional case. The solution of the sytem can be unique, infinite or empty and all these cases



explained with examples.

This activity was carried out online using Google meet.

A total of 78 participants participated in the program. The participants were mainly B.Tech. students of our institute, outside students, researchers and teachers from institute and other institutes **affiliated** to SRTMU Nanded.



At the begining Prof Y. V. Joshi, Director SGGSIE&T Nanded **briefly** explained how the subject is important for all engineering. He also welcomed the expert and breifly talked about the CoE and institute profile.

Dr. A. R. Patil, Head Mathematics Department explained the objectives of arranging this expert lecture and welcomed all the participants and coordinated the event to its successful end.

There were questions and answers from the audience towards the end of the program.

Finally the event was ended with vote of thanks.