PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement
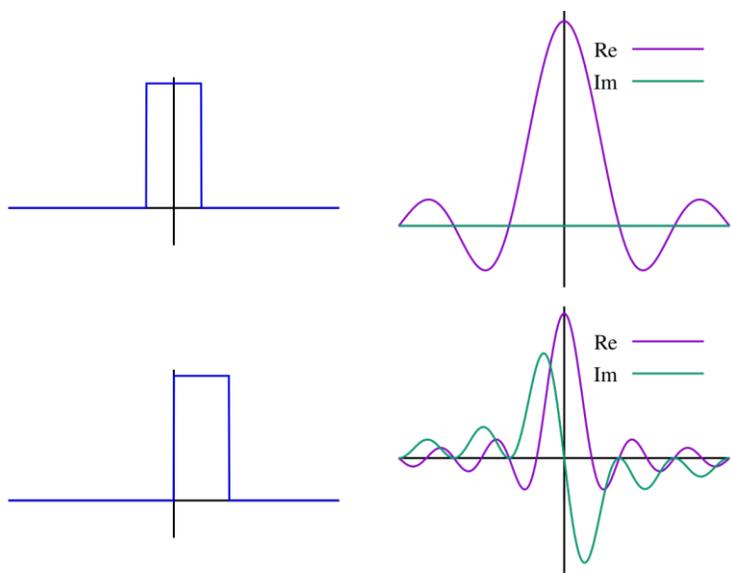
facilitated by the Institute of Smart Structures and Systems

Module PMRF-ISSS085/III/2025

Numerical analysis of Fourier transforms

Name of the PMRF student

Radhika Prasad

Required background of the students taught

Undergraduate students in Physics, Mathematics

Details of the content of the module

We will start with basics of programming language (Mathematica). Then, we will first look at Fourier series. This will be generalised to Fourier transforms. We will look at applications of Fourier transforms in electric fields and optics. The mathematical framework will be developed and discussed in detail, before studying the numerical analysis techniques and coding optimisation.

Schedule of the module

Schedule: Daily 3-5 pm

Start Date: 24th August (tentative)

End Date: 31st August (tentative)

Meeting link : Will be shared later

Link

Contact email ID: isss.forum@gmail.com

Registration link: https://forms.gle/oCdcVnMYCfhVJZ7MA