

סמינר - SEMINAR

הנדך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ד' 3.04.2019
(כ"ז באדר ב' תשע"ט), בניין דן קאהן, חדר 217, 13:30.

מרצה:

Prof. Antonio Carcaterra

Director of the PhD School in Theoretical and Applied Mechanics
President of Sapienza Innovazione
Faculty of Civil and Industrial Engineering
Dept. of Mechanical and Aerospace Engineering
Sapienza University of Rome

על הנושא:

Waves and Networks

The seminar will be given in English

להלן תקציר ההרצאה:

Wave propagation in complex networks gives rise to unexpected phenomena and leads to counterintuitive results as a direct consequence of the topology of the complex interactions among their nodes.

Energy and information propagation in such networks have been proposed and used to investigate interconnections in social networks, brain studies, and in metamaterials.

This seminar describes development of waves that emerge through interconnections among a set of nodes located on a ring and introduces the concept of group velocity in such a complex network.

We also introduce an integro-differential equation with double convolution to describe various topologies and apply it to the classical problem of a fluid-loaded beam to demonstrate the peculiar results that can emerge in complex networks.

מארח: פרופ' יצחק בוכר

בברכה,

פ"מ א"מ א"מ א"מ
מרכז הסמינרים