

סמינר - SEMINAR

הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ב' 6.02.2017
(י' בשבט, תשע"ז), בבניין דן קאהן, אודיטוריום 1, 14:30.

ירצה:

פרופ"מ ספי גבלי
הפקולטה להנדסת מכונות
הטכניון

על הנושא:

Bi-stability and multi-stability in structures

להלן תקציר ההרצאה:

A wide range of intriguing mechanical phenomena is related to bi-stability and multi-stability. Examples are the shape memory effect and super-elasticity observed in materials undergoing martensitic phase transformations, the mechanical behavior of nano-pillars under compression, and the saw-tooth pattern observed in single molecule experiments of structural proteins such as titin. All these structures are characterized by a wiggly energy landscape and multiple metastable configurations.

In the past few years, we have developed theoretical models aiming at providing insights into the mechanical behavior of such structures. In this talk I will present some of our findings, with emphasis on consequences of discreteness in structures undergoing discrete phase transformations, such as nano-pillars and unfolding/refolding of proteins, and also mechanical aspects of the continuum-level behavior of structures undergoing remodeling or spatial organization of their composition.

בברכה,

פרופ"מ שאול אולוסקי
מרכז הסמינרים