

סמינר - SEMINAR

הנך מוזמנת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ד' 21.06.2017 (כז' בסיון, תשע"ז), בבניין דן קאהן, אודיטוריום 1, 13:30.

ירצה:

Prof. Ellad B. Tadmor

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על הנושא:

Multiscale Simulation of 2D Heterostructures: Incommensurate to Commensurate Transformations in Twisted Graphene Bilayers

The seminar will be given in English

להלן תקציר ההרצאה:

The synthesis of graphene, a one-atom thick 2D graphitic sheet, was a revolution in materials physics. Since then a host of other 2D materials have been discovered that can be stacked to create layered heterostructures with remarkable properties. Due to the weak van der Waals interaction between layers, the resulting structures can be incommensurate and therefore challenging to model. We describe recent work on developing a hybrid continuum-atomistic computational framework for simulating the mechanical response of 2D heterostructures. In agreement with electron diffraction experiments, simulations of twisted bilayer graphene show a transformation from an initially incommensurate structure to commensurate structures separated by localized solitons. This behavior is explained using a simple mechanical model.

מאת: פרופ"מ דן מרדכי

בברכה,

פרופ"מ שאול אולובסקי
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