SEMINAR - סמינר

הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות, שתתקיים ביום ג' 16.05.2017 (כ' באייר, תשע"ז), בבניין דן קאהן, אודיטוריום 1, 13:00.

<u>ת רצה</u>:

Dr. Noemi Barrera
Post Doc Fellow, School of Physics and Astronomy, Raymond and Beverly Sackler
Faculty of Exact Sciences
Tel Aviv University, Tel Aviv 69978, Israel

<u>על הנושא</u>:

Strain Intermittency in Shape memory Alloys

The seminar will be presented in English

<u>להלן תקציר ההרצאה:</u>

We study experimentally the intermittent progress of the mechanically induced martensitic transformation in a Cu-Al-Be single crystal through a full-field measurement technique: the grid method. We utilize an especially designed gravity-based device which applies a perfectly monotonic uniaxial load through very small force increments.

The sample exhibits hysteretic superelastic behavior during the forward and reverse cubic-monoclinic transformation, produced by the evolution of the strain field of the phase microstructures. The in-plane linear strain components are measured on the sample surface during the loading cycle, and we characterize the strain intermittency in a number of ways, showing the emergence of power-law behavior for the strain avalanching over almost six decades of magnitude. Joint work with X. Balandraud, P. Biscari, M. Grediac, G. Zanzotto.

<u>מארח</u> : פרופ"מ גל שמואל

בברכה,

פרופ"א שמואל אלטמן
מרכז הסמינרים