## Technion-Israel Institute of Technology Faculty of Mechanical Engineering



27.02.2019 הנך מוזמן/ת להרצאה סמינריונית של הפקולטה להנדסת מכונות שתתקיים ביום די 27.02.2019 (כבי באדר אי, תשעייט), בניין דן קאהן, אודיטוריום 1, 30 (כבי באדר אי, תשעייט),

מרצה: אלון בן משה

<u>מנחה</u>: פרופי∕ח ראובן כץ

מנחה שותף: ד"ר אביגדור זוננשיין, מרכז גורדון, הטכניון

:על הנושא

## מורכבות וביצועים של מערכות מכניות Complexity and performance of mechanical systems

The seminar will be given in Hebrew

## : תקציר ההרצאה

The design process starts with the analysis of functional requirements and ends with complete set of manufacturing, assembly and testing procedures of the product or system. Along this process, the engineer has to choose and prove design concepts, take many engineering decisions, choose among manufacturing processes and plan product assembly. As a result, the same design mission may lead to several different (yet acceptable) solutions. Is there any correlation between the complexity and performance of these solutions? Is it possible to reduce product complexity and improve its performance?

The seminar will start with brief description of design complexity studies and measurement methods. Next, two phases of the experimental evaluation will be presented and discussed:

- a. Design analysis, complexity and performance measurements of three equivalent systems designed by ME students at the design and manufacturing lab.
- b. Repeated measurements of complexity and performance of same systems, after minor design changes performed by and an experienced mechanical engineer that was aware of design complexity methods .

בברכה,

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