

**תכנית האנרגיה ע"ש גרנד מתכבדת להזמין להרצאה  
סמינריונית שתינתן ע"י:**

## **רון דנון**

**התכנית הבין-יחידתית לאנרגיה**

**בנושא:**

### **Performance Predictions of a Coandă-based Reciprocating Wind Energy Generator**

The present research involves the assessment of a new concept in wind energy generation where the Coandă effect, applied periodically, is used to drive a large pendulum in reciprocating motion. The work is motivated by the need to significantly decrease the cost of wind energy as it relates to manufacture, installation and maintenance. Dynamical models of increasing complexity and degrees-of-freedom were developed and validated. Furthermore, due to the dearth of experimental data on unsteady Coandă cylinders with strong three-dimensional effects, a dedicated wind-tunnel-based experiment was set up to assess the effects of both. Preliminary indications are that power coefficients in excess of 40% are possible, comparable to similar sized conventional turbines, with lower potential overall costs.

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**במסגרת עבודת מחקר לתואר מגיסטר**

**ההרצאה תתקיים ביום ד' 18.2.15 בשעה 14:30, אודיטוריום 1,  
בניין דן-קאן, הפקולטה להנדסת מכונות.**