



The Department of Physics at the University of Cyprus  
is organizing a seminar on

**Wednesday, 24 of October 2018, time 3:00 p.m.**

Room B228, Building 13, New Campus

Speaker:

**Prof. Alessandro Troisi**  
**Department of Chemistry & Materials Innovation Factory,**  
**University of Liverpool**

**“ Organic materials for electronics:  
design by model reduction”**

The principles of how charge is transported in organic materials (molecular, polymeric) will be reviewed. We then present a common strategy to design new materials for electronics based on the construction of reduced (predictive) models from (detailed) atomistic one. We will argue that, somewhat counterintuitively, our models are more predictive if they contain less details. The topics considered in this lecture include (i) the definition of a map of all organic semiconductors for charge transport; (ii) the desirable properties of electron acceptors in organic solar cells; (iii) derivation of possible design rules for semiconducting polymers; (iv) uses and limitations of machine learning approaches for the same problems.

For more information, please contact:  
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