



UNIVERSITY  
OF WARSAW

CeNT CENTRE  
OF NEW  
TECHNOLOGIES

invites to a seminar by

**Prof. Jacek A. Majewski**

**Department of Complex System Modeling**

**Institute of Theoretical Physics**

**Faculty of Physics  
University of Warsaw**

## **"New opportunities in the flat world"**

**October 5th , 2018 at 12 p.m.**

Venue: Centre of New Technologies, Banacha 2C,  
Lecture Hall 0142 (Ground floor)

Host: dr hab. Joanna Sułkowska

I would like to survey a general role played by layered atomically thin nanostructures in materials science.

Providing some illustrating examples from own research, I would like to point out how 2D materials can enhance the features of bulk systems (e.g. thermoelectricity) or can generate possibility of completely novel functionalities (e.g. valleytronics).

I will mention also the role of 2D systems in such vivid challenges as (i) carbon caption, (ii) energy harvesting (photovoltaics), and (iii) catalysis with non metals.