



**Di, 25.3.2014, 14:15 Uhr**  
**Hörsaal für Physik**

**Application of CdS nanostructured layers in hybrid solar cells:  
Effect of the layer morphology and dye sensitizer on photovoltaic performance**

Dr. O.P.Dimitriev

*V.Lashkaryov Institute of Semiconductor Physics, Nauki , Kiev, Ukraine*

In this talk, organic-inorganic hybrid solar cells based on CdS nanostructured layers of different morphologies, such as nano-textured films, nanowire (NW) array and branched core-shell NW structures will be presented. Three types of hybrid solar cells will be considered depending on the organic component of the cell and the cell structure, namely: (i) CdS – poly(3-hexylthiophene) (P3HT) cells, (ii) inverted solar cells, (iii) CdS - dye sensitized solar cells.