

Institut für Physik

Theoriekolloquium

Am **5. Mai 2011** um **14.15 Uhr** in **W2 1-143** hält

Herr Prof. Dr. Philipp Maaß (Osnabrück)

einen Vortrag mit dem Titel

Fluctuation effects and cluster formation in kinetic thin film growth

Solid structures of nanoscale dimensions have opened a field of new physics and materials with novel properties. A widely applied preparation method is the self-organized structure formation by deposition of atoms and molecules on surfaces, where the interplay of diffusion, aggregation, segregation and superlattice ordering yields a rich variety of growth phenomena. The resulting structures are usually frozen-in non-equilibrium structures with properties distinctly different from the equilibrium bulk phases. In my talk I will present theories and models for three interrelated problems: (i) island growth in the first layer, (ii) second layer nucleation, (iii) growth of binary alloy nano-clusters with perpendicular magnetic anisotropy, and (iv) second layer induced morphologies of fulleren clusters on insulating substrates.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Andreas Engel