



The supervisory board of the Kestcells Project announces the Seminar ASC-02-03-04:

## **“Thermodynamics of phase diagrams” (3 seminar lectures)**

**Dates:** 15<sup>th</sup>, 17<sup>th</sup> and 22<sup>th</sup> of October, 2013.

**Place:** Ångström Laboratory, Lägerhyddsvägen 1, Uppsala, Sweden

**Summary:** A series of lectures will be offered this Fall by the Department of Physics and Astronomy on the topic "Thermodynamics of phase diagrams". A detailed description of the planned lectures by Moritz to Baben, is given below:

### **Program**

#### **Seminar ASC02**

- 15th October 10:15 - 12:00, Å6K1107
  - Basics in Thermodynamics,
    - The laws of thermodynamics
    - Gibbs energy
  - Thermodynamics behind phase diagrams I
    - Ideal solution model
    - Regular solution model I

#### **Seminar ASC03**

- 17th October, 10:15 - 12:00, Å6K1107
  - Thermodynamics behind phase diagrams II
    - Constructing a phase diagram
  - Phase diagrams
    - Influence of Enthalpy of Mixing
    - Influence of Crystal Structure
    - Compound Formation
    - What Do I learn from an existing phase diagram?



## Seminar ASC04

- 22nd October, 10:15 - 12:00, Å73121
  - Phase formation in non-equilibrium
    - Predicting phase formation during thin film deposition
  - Example: Cr<sub>2</sub>AlC
    - Phase formation during thin film deposition
    - Phase transformation from amorphous to equilibrium