

Übungen zur  
**CiS-Computational Physics**

– Blatt 8 –

Prof. Dr. Alexander Lichtenstein  
zum 11.01.2016

**Aufgabe 1) TB-model for HTSC**

Calculate DOS for 2-dim. TB-model of High-temperature superconductors.

**Aufgabe 2) Electronic structure of Si**

Calculate band structure of Si using MindLab-software. How large is the bandgap?

**Aufgabe 3) Magnetism of Iron**

Calculate magnetic band structure of BCC and FCC Fe. How large is magnetic moment of iron?