

## Solid State Theory I - TheoSolidSt

<i>Course</i>	Solid State Theory I
<i>Course No.</i>	TheoSolidSt

Category	Type	Language	Teaching hours	CP	Semester
Elective	Lecture with exercises	English	3+1	6	WT

### Requirements for Participation:

**Preparation:** training in theoretical physics at the B.Sc. level, experimental solid state physics

**Form of Testing and Examination:** written or oral examination

**Length of Course:** 1 semester

**Aims of the Course:** this course gives an introduction to the physics of electrons and phonons in solids together with theoretical concepts and techniques as applied to these systems.

**Contents of the Course:** The lecture investigates basic concepts to describe solids and their excitations. Various applications are discussed with emphasis on experimental and theoretical research directions of the physics department in Cologne.

**Recommended Literature:** Ashcroft/ Mermin: “Solid State Physics”

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