Course: Quantum Field Theory II

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<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Language</th>
<th>Teaching Hours</th>
<th>CP</th>
<th>Semester</th>
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</thead>
<tbody>
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<td>Core Course (GR-QFT)</td>
<td>Lecture</td>
<td>English</td>
<td>4+2</td>
<td>8</td>
<td>WT</td>
</tr>
<tr>
<td>Specialized Course (ThSol)</td>
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</tbody>
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Requirements

Preparation:
Quantum Field Theory I

Form of Testing and Examination:
Written or oral examination

Length of Course:
1 semester

Aims of the course:
Quantum field theory is one of the main tools of modern physics with many applications ranging from high-energy physics to solid state physics. A central topic of this course is the concept of spontaneous symmetry breaking and its relevance for phenomena like superconductivity, magnetism or mass generation in particle physics.

Contents of the course:
- Correlation functions: formalism, and their role as a bridge between theory and experiment
- Renormalization
- Topological concepts

Recommended literature: