

# 28th ‘Saalburg’ Summer School

## FOUNDATIONS AND NEW METHODS IN THEORETICAL PHYSICS

29 August – 09 September, 2022  
Bayrischzell, Bayern



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This school gives up to 30 PhD students of theoretical physics the opportunity of becoming familiar with a selection of modern aspects and methods in theoretical and mathematical physics. Basic knowledge of quantum field theory, general relativity and group theory is assumed. Lectures and exercises will be conducted on:

<b>Spontaneous symmetry breaking and Nambu–Goldstone bosons</b>	<b>T. Brauner</b>	Universitetet i Stavanger
<b>Conformal field theory</b>	<b>S. Fredenhagen</b>	Universität Wien
<b>Phase transitions in the early universe</b>	<b>M. Postma</b>	Nikhef, Amsterdam
<b>String-inspired methods and the worldline formalism</b>	<b>C. Schubert</b>	Universidad Michoacana, Morelia
<b>Modern methods for scattering amplitudes</b>	<b>L. Tancredi</b>	TU München

For electronic application and further information please go to

<https://saalburg.aei.mpg.de/>

The deadline is 15 July, and further instructions (list of participants, suggested literature) will appear starting August. Participants cover their travel and a school fee of 300 Euro; lodging and food (without drinks) are provided by the school. In 2002, the school moved from Saalburg to the village of Trockenborn-Wolfersdorf, and in 2018 it relocated to Heigenbrücken in the Spessart mountains. This year, it takes place in the Bavarian Alps.

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