24th 'Saalburg' Summer School FOUNDATIONS AND NEW METHODS IN THEORETICAL PHYSICS

10 – 21 September, 2018 Heigenbrücken, 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:

| <i>p</i> -form gauge theories in physics | G. Dvali | LMU München & New York University |
|--|--------------|-------------------------------------|
| Phase transitions in the early Universe | M. Hindmarsh | University of Sussex |
| Dualities in 2+1 dimensions and beyond | A. Karch | University of Washington, Seattle |
| Anomalies in quantum field theory | S. Theisen | MPI für Gravitationsphysik, Potsdam |
| Localization and holography | K. Zarembo | Nordita, Stockholm |

For electronic application and further information please go to

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

The deadline is 30 June, and further instructions (list of participants, suggested literature) will appear starting July. Participants cover their travel and a school fee of 200 Euro; lodging and food (without drinks) are provided by the school. In 2002, the school's location moved from Saalburg to the village of Trockenborn-Wolfersdorf, and in 2018 it relocated to Heigenbrücken, about 50 km east of Frankfurt am Main in the Spessart forest.

Laura Covi Göttingen Arthur Hebecker Heidelberg Olaf Lechtenfeld Hannover Ivo Sachs München

Stefan Theisen Potsdam



