



# STRING STEILKURS - PART II

## Advanced Topics in String Theory

20-31 July 2015 , Universität Hamburg & DESY

The course is divided into a preparatory 1st week and a more advanced 2nd week. The lectures focus on current topics in String Theory and Mathematical Physics. Knowledge in Quantum Field Theory, General Relativity and the basics of String Theory is assumed.

### Lectures:

#### Intermediate level (1st week)

- V. Schomerus: Introduction to the AdS/CFT correspondence
- J. Teschner: Quantum aspects of supersymmetric field theories
- S. Vandoren: Differential geometry of supergravity
- F. Göhmann: Introduction to integrable models

#### Research level (2nd week)

- F. Benini: Localization in supersymmetric field theories
- J. de Boer\*: Entanglement entropy and firewalls
- D. Persson: Mathematics of hypermultiplet moduli spaces
- V. Rychkov: Introduction to bootstrap methods
- G. Travaglini: Amplitudes and correlation functions in supersymmetric theories
- D. Volin: Integrable models in supersymmetry and string theory

(\* To be confirmed)

The online registration form and further information can be found at the following URL:

<https://indico.desy.de/event/SSK15>

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