

# Local Quantum Physics Workshop #49



## LQP 49

### Program

all talks are in H13

#### Thursday, 7.11.

- 14:00-14:50 **Rainer Verch** (Leipzig)  
Quantum Non-Causality in Spacetime  
May Be Not Exclusively Quantum
- 14:50-15:30 **Jan Mandrysch** (Vienna)  
Implementing a Causal Measurement Scheme for Quantum Fields

*Coffee break*

- 16:00-16:40 **Beatrice Costeri** (Pavia)  
Trace anomaly for the Stress-Energy Tensor of a Self-interacting  
Scalar Field on a curved spacetime
- 16:40-17:20 **Albert Much** (Leipzig)  
Deformation Quantization of QFTs in curved spacetimes
- 17:20-18:00 **Christoph Richter** (Leipzig)  
Scaling Limit of de Sitter Quantum Field Theories

#### Friday, 8.11.

- 09:30-10:20 **Jan Dereziński** (Warsaw)  
Lamb shift as a problem in mathematical physics
- 10:20-11:00 **Arne Hofmann** (Hannover)  
Casimir effect for dielectric media

*Coffee break*

- 11:20-12:00 **Ian Koot** (Erlangen)  
Thermal Field theories and Wedge-Modular Inclusions
- 12:00-12:40 **Markus Fröb** (Leipzig)  
New modular Hamiltonians

*Lunch*

- 14:00-14:40 **Leonardo Sangaletti** (Leipzig)  
An L4 quantum energy inequality for the thermal sector
- 14:40-15:20 **Jani Kastikainen** (Würzburg)  
Driven conformal field theory and circuit complexity

*Coffee break*

- 15:50-16:30 **Andrea Pizzamiglio and Lorenzo Trezzini** (Pavia)  
Quantum Cellular Automata and their Classification

19:00 *Dinner "Goldener Hecht"*

#### Saturday, 9.11.

- 09:30-10:10 **Filippo Nava** (York)  
Interplay between boundary conditions and the Lorentzian Wetterich equation
- 10:10-10:50 **Andras Laszlo** (Budapest)  
On the running and the UV limit of Wilsonian renormalization group flows

*Coffee break*

- 11:10-11:50 **Maria Stella Adamo** (Erlangen)  
Osterwalder-Schrader axioms for unitary full VOAs
- 11:50-12:40 **Sebastiano Carpi** (Rome)  
Vertex algebras and non-unitary Wightman CFTs