

Theoretical and Mathematical Physics Division

Fachverband Theoretische und Mathematische Grundlagen der Physik (MP)

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Includes classical and quantum field theory, curved spacetime and entropy, equilibrium and non-equilibrium systems, complexity and quantum information theory. Presents progress in methods and concepts, model studies and structure analysis.

Overview of Invited Talks and Sessions

(Lecture halls H3, H6, and H7; Poster P)

Invited Talks

MP 2.1	Tue	11:00–11:40	H7	KPZ universality in mathematics and physics — ●PATRIK FERRARI
MP 3.1	Tue	11:45–12:25	H7	Path integral based non-equilibrium quantum field theory of non-relativistic pairs inside an environment — ●TOBIAS BINDER
MP 7.1	Tue	17:00–17:40	H7	Stochastic Dynamics in Quantum Mechanics — ●DENIS BERNARD
MP 13.1	Thu	11:00–11:40	H6	Exact solution of the scalar QFT Φ^4 model on the 4-dimensional noncommutative Moyal space — ●ALEXANDER HOCK
MP 14.1	Thu	11:45–12:25	H6	Temperature and entropy-area relation of quantum matter near spherically symmetric outer trapping horizons — ●RAINER VERCH

Invited talks of the joint symposium Entanglement (SYEN)

See SYEN for the full program of the symposium.

SYEN 1.1	Mon	16:30–17:10	Audimax	Squeezed and entangled light - now exploited by all gravitational-wave observatories — ●ROMAN SCHNABEL
SYEN 2.1	Mon	17:10–17:50	Audimax	Entanglement and Explanation — ●CHRIS TIMPSON
SYEN 3.1	Mon	17:50–18:30	Audimax	Entanglement and complexity in quantum many-body dynamics — ●TOMAZ PROSEN

Sessions

MP 1.1–1.3	Mon	11:00–12:15	H3	AdS-CFT I
MP 2.1–2.1	Tue	11:00–11:40	H7	HV 1: Stochastic Non-Equilibrium
MP 3.1–3.1	Tue	11:45–12:25	H7	HV 2: Non-Equilibrium Quantum Field Theory
MP 4.1–4.2	Tue	14:00–14:50	H7	AdS-CFT II
MP 5.1–5.2	Tue	15:00–15:50	H7	Loop Quantum Gravity
MP 6.1–6.1	Tue	16:30–16:55	H7	Quantum Statistical Mechanics
MP 7.1–7.1	Tue	17:00–17:40	H7	HV 3: Stochastic Quantum Mechanics
MP 8.1–8.1	Tue	17:45–18:10	H7	Non-equilibrium Statistical Mechanics
MP 9.1–9.2	Wed	14:00–14:50	H7	Anomalies in Quantum Field Theory
MP 10.1–10.2	Wed	15:00–15:50	H7	Nonrelativistic Quantum Field Theory
MP 11.1–11.3	Wed	16:30–17:45	H7	Quantum Information
MP 12.1–12.1	Wed	17:50–18:15	H7	Quantum Mechanics
MP 13.1–13.1	Thu	11:00–11:40	H6	HV 4: Quantum Field Theory in Noncommutative Spacetime
MP 14.1–14.1	Thu	11:45–12:25	H6	HV 5: Quantum Field Theory near Black Hole Horizons
MP 15.1–15.2	Thu	14:00–14:50	H6	Quantum Field Theory: Renormalization
MP 16.1–16.2	Thu	15:00–15:50	H6	Strongly Interacting Quantum Field Theory

MP 17.1–17.4	Thu	16:30–18:10	H6	Entropy in Quantum Field Theory
MP 18.1–18.3	Fri	11:00–12:15	H6	Constructive Tools for Quantum Field Theory
MP 19.1–19.2	Fri	14:00–14:50	H6	Fundamental Ideas
MP 20.1–20.1	Mon	10:30–11:00	P	Poster (permanent)