

Theoretical and Mathematical Physics Division

Fachverband Theoretische und Mathematische Grundlagen der Physik (MP)

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The programme includes classical and quantum field theory, equilibrium and non-equilibrium systems, complexity and quantum information theory. It presents progress in methods and concepts, model studies and structure analysis.

Overview of Invited Talks and Sessions

(Lecture halls H-HS VII (MP1-10 und MP15-18) und H-I (MP11-14); Poster H-HS VII)

Invited Talks

MP 2.1	Mon	16:30–17:10	H-HS VII	Stochastic Dynamics in Quantum Mechanics — ●DENIS BERNARD
MP 4.1	Tue	11:00–11:40	H-HS VII	Universal structures in quantum field theory far from equilibrium — ●JÜRGEN BERGES
MP 6.1	Tue	17:00–17:40	H-HS VII	KPZ universality in mathematics and physics — ●PATRIK FERRARI
MP 8.1	Wed	10:30–11:10	H-HS VII	Exact solution of the noncommutative ϕ_4^4 QFT model — ●ALEXANDER HOCK, RAIMAR WULKENHAAR, HARALD GROSSE
MP 15.1	Thu	14:00–14:30	H-HS VII	The D-CTC condition is generically fulfilled in classical (non-quantum) statistical systems — JÜRGEN TOLKSDORF, ●RAINER VERCH

Sessions

MP 1.1–1.4	Mon	12:00–13:20	H-HS VII	Gravity: Classical and Quantum
MP 2.1–2.1	Mon	16:30–17:10	H-HS VII	HV Bernard: Stochastic Dynamics in Quantum Mechanics
MP 3.1–3.2	Mon	17:15–17:55	H-HS VII	Quantum Mechanics
MP 4.1–4.1	Tue	11:00–11:40	H-HS VII	HV Berges: QFT Far From Equilibrium
MP 5.1–5.2	Tue	11:45–12:25	H-HS VII	QFT Far From Equilibrium
MP 6.1–6.1	Tue	17:00–17:40	H-HS VII	HV Ferrari: KPZ Universality
MP 7.1–7.2	Tue	17:45–18:25	H-HS VII	Classical Field Theory
MP 8.1–8.1	Wed	10:30–11:10	H-HS VII	HV Hock: QFT in Noncommutative Space
MP 9.1–9.2	Wed	11:15–11:55	H-HS VII	Quantum Field Theory
MP 10.1–10.3	Wed	12:00–13:00	H-HS VII	Quantum Field Theory: gauge theories
MP 11.1–11.4	Wed	14:15–15:35	H-HS I	AdS/CFT: Complexity
MP 12.1–12.1	Wed	15:40–16:00	H-HS I	Tensor Networks I
MP 13.1–13.2	Wed	16:30–17:10	H-HS I	Tensor Networks II
MP 14	Wed	17:15–18:00	H-HS I	Mitgliederversammlung
MP 15.1–15.1	Thu	14:00–14:30	H-HS VII	HV Verch: Quantum Information
MP 16.1–16.2	Thu	14:40–15:20	H-HS VII	Quantum Information
MP 17.1–17.2	Thu	15:20–16:00	H-HS VII	Quantum Information and QFT
MP 18.1–18.2	Thu	16:30–17:10	H-HS VII	Alternative Ideas
MP 19.1–19.1	Mon	11:00–18:00	H-HS VII	Poster (Monday - Thursday)

Invited talks of the PhD prize symposium SYMD

See SYMD for the full program of the symposium.

SYMD 1.1	Mon	14:30–15:00	H-Aula/HS I/HS X	N-Particle Scattering and Asymptotic Completeness in Wedge-Local Quantum Field Theories — ●MAXIMILIAN DUELL
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SYMD 1.2	Mon	15:00–15:30	H-Aula/HS I/HS X	First observation of double electron capture in Xe-124 with the dark matter detector XENON1T — •ALEXANDER FIEGUTH
SYMD 1.3	Mon	15:30–16:00	H-Aula/HS I/HS X	Anisotropic Transport of Galactic Cosmic Rays based on Stochastic Differential Equations — •LUKAS MERTEN

Invited talks of the joint Symposium "Entanglement"

See SYEN for the full program of the symposium.

SYEN 1.1	Thu	11:00–11:40	J-HS D	Entanglement and Complexity in Quantum Many-Body Systems — •TOMAZ PROSEN
SYEN 1.2	Thu	11:40–12:20	J-HS D	Entanglement and Explanation — •CHRIS TIMPSON
SYEN 1.3	Thu	12:20–13:00	J-HS D	Production and observation of entanglement in quantum optics — •ROMAN SCHNABEL

Mitgliederversammlung des FV MP / Members' Assembly of the MP Division

Wednesday 17:15–18:00 H-HS I

Vorläufige TOPs:

- Bericht
- Sektion "Materie und Kosmos" (SMuK)
- Planungen
- Verschiedenes