Gravitation and Relativity Division with Astronomical Society Fachverband Gravitation und Relativitätstheorie (GR) gemeinsam mit der Astronomischen Gesellschaft e.V. (AG)

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This year's annual meeting of our division is marked by the centenary of General Relativity, a happy occasion that we intend to reflect in a somewhat special programme. We will have two plenary talks, one on the history of General Relativity and one on recent developments in cosmology. There will also be a joint symposium on geometric paradigms in modern physics (with divisions GP, MP, TT, and the working group AGPhil) and an unusual large number of invited talks by renowned researchers representing in some depth the impressive spectrum and fascination of ongoing research in observational and theoretical gravitation, including geodesy, astrometry, astrophysics of neutron stars and black holes, cosmology, and, last not least, the theory of General Relativity proper, its mathematical properties, its relation to other fundamental interactions, and its attempted integration into the realm of quantum(field)theories. As usual, there will be many short talks of mostly technical nature, which complete our programme in an essential way.

Overview of Invited Talks and Sessions

(Lecture rooms: H 2013 and H 2033)

Plenary Talks related to Gravitation and Relativity

PV VII	Mon	14:00–14:45	H 0105	**The Genesis and Renaissance of General Relativity** — •Jürgen Renn
PV XVIII	Wed	14:00–14:45	H 0105	**Cosmological Inflation - A Confrontation with Data** — •Dominik Schwarz

Invited Talks

GR 1.1	Mon	9:30–10:10	H 2013	**Was Einstein Right? A Centennial Assessment** — •Clifford Will
GR 1.2	Mon	10:10–10:50	H 2013	**Precision tests of General Relativity using cosmic clocks** — •Michael Kramer
GR 1.3	Mon	11:10–11:50	H 2013	**Results from the Wilkinson Microwave Anisotropy Probe** — •Eiichiro Komatsu
GR 1.4	Mon	11:50–12:30	H 2013	**General Relativity as everyday practical tool: time, navigation and geodesy** — •Claus Lämmerzahl
GR 4.1	Tue	9:30–10:10	H 2013	**Characteristic Cauchy problems in general relativity** — •Piotr Chrusciel
GR 4.2	Tue	10:10–10:50	H 2013	**Mass and center of mass of asymptotically flat spaces** — •Gerhard Huisken
GR 4.3	Tue	10:50–11:30	H 2013	**Loop quantum gravity – an unusual QFT** — •Hanno Sahlmann
GR 5.1	Tue	11:50–12:30	H 2013	**Quantum Gravity - General Introduction and Recent Developments** — •Claus Kiefer
GR 9.1	Wed	9:30–10:10	H 2013	**Gravitational radiation from compact binary systems** — •Luc Blanchet
GR 9.2	Wed	10:10–10:50	H 2013	**Black Holes and Neutron Stars in Numerical General Relativity** — •Bernd Bruegmann
GR 9.3	Wed	11:10–11:50	H 2013	**Supernova Cosmology** — •Bruno Leibundgut

GR 9.4	Wed	11:50–12:30	H 2013	**Large scale structures in the universe** — •Volker Mueller
GR 10.1	Wed	15:00–15:40	H 2013	**Neutron-star binaries: Einstein's richest laboratory** — •Luciano Rezzolla
GR 14.1	Thu	9:30–10:10	H 2013	**General Relativity and Astrometry** — •Sergei Klioner
GR 14.2	Thu	10:10–10:50	H 2013	**Where is the energy stored in the gravitational field?** — •Gerhard Schäfer
GR 17.1	Fri	9:30–10:10	H 2013	**The Galactic Center Massive Black Hole** — •Reinhard Genzel
GR 17.2	Fri	10:10–10:50	H 2013	**Gravitational lensing – a versatile tool for astrophysics** — •Peter Schneider

Invited talks of the joint symposium SYGP

See SYGP for the full program of the symposium.

SYGP 1.1	Thu	15:00–15:30	H 0105	**General relativity: a theory born in creative confusion** — •Harvey Brown
SYGP 1.2	Thu	15:30–16:00	H 0105	**Gravitating Non-Abelian Fields: Solitons and Black Holes** — •Jutta Kunz
SYGP 1.3	Thu	16:00–16:30	H 0105	**Geometric principles in the physics of topological matter** — •Alexander Altland
SYGP 1.4	Thu	16:30–17:00	H 0105	**General Covariance in Quantum Field Theory on Curved Spacetimes** — •Thomas-Paul Hack
SYGP 1.5	Thu	17:00–17:30	H 0105	**The (noncommutative) Geometry of the Standard Model of Particle Physics** — •Christoph Stephan

Sessions

GR 1.1–1.4	Mon	9:30–12:30	H 2013	**Invited Talks 1**
GR 2.1–2.2	Mon	15:00–15:40	H 2013	**Experimental Tests**
GR 3.1–3.4	Mon	15:40–17:30	H 2013	**Classical General Relativity**
GR 4.1–4.3	Tue	9:30–11:30	H 2013	**Invited Talks 2 (with MP)**
GR 5.1–5.1	Tue	11:50–12:30	H 2013	**Invited Talks 3**
GR 6.1–6.4	Tue	14:00–15:20	H 2013	**Quantum Gravity and Quantum Cosmology**
GR 7.1–7.2	Tue	15:20–16:00	H 2013	**Cosmology**
GR 8.1–8.9	Tue	14:00–16:00	H 2033	**Poster Session**
GR 9.1–9.4	Wed	9:30–12:30	H 2013	**Invited Talks 4**
GR 10.1–10.1	Wed	15:00–15:40	H 2013	**Invited Talks 5**
GR 11.1–11.3	Wed	15:40–17:10	H 2013	**Relativistic Astrophysics**
GR 12.1–12.3	Wed	17:10–18:10	H 2013	**Gravitational Waves**
GR 13.1–13.6	Wed	16:30–18:30	H 2033	**Alternative Aspects and Approaches**
GR 14.1–14.2	Thu	9:30–10:50	H 2013	**Invited Talks 6**
GR 15.1–15.5	Thu	11:10–12:50	H 2013	**Fundamental Problems and General Formalism**
GR 16.1–16.8	Thu	15:00–18:10	H 2013	**Numerical Relativity**
GR 17.1–17.2	Fri	9:30–10:50	H 2013	**Invited Talks 7**
GR 18.1–18.6	Fri	11:10–13:10	H 2013	**Black Holes**

Annual General Meeting of the Gravitation and Relativity Division

Thursday March 19th 18:30–19:30 H 2013

- opening and approval of the agenda
- approval of the minutes of our last annual general meeting
- report by the chairman
- past activities
- future activities
- dissertation prize
- book publications
- miscellaneous