

RTG Models of Gravity, Renewal Conference

04.-07. October, University of Oldenburg, Germany



Models of Gravity - Black Holes, Neutron Stars and the structure of space-time

Tuesday, 4.10.2016

Morning Session Chair: Silke Britzen

Observational BH

9.00 - 9:50	A. Eckart	The galactic center black hole
9:50 - 10:40	I. Fernini	VLA Radio Observations of FR II Radio Galaxies and Quasars
10.40 - 11.10	<i>Coffee</i>	
11.10 - 12.00	A. Lobanov	Probing the Innermost Regions of AGN Jets and Their Magnetic Fields with RadioAstron
12.00 - 12.50	S. Gillessen	The Galactic Center: A unique astrophysical laboratory
12.50 - 14.30	<i>Lunch</i>	

Afternoon Session Chair: Domenico Giulini

14.30 - 15.20	B. Krishnan	Observations of the binary black hole coalescence events GW150914 and GW151226
	<i>Quantum BH</i>	
15.20 - 16.10	C. Kiefer	Quantum black hole without singularity
16.10 - 16.40	<i>Coffee</i>	
16.40 - 17.30	S. Giddings	Searching for soft quantum structure of black holes with EHT
18:00	<i>Conference Dinner "Zum Drögen Hasen"</i>	

Wednesday, 5.10.2016

Morning Session Chair: Elizabeth Winstanley

Quantum BH

9.00 - 9:50	C. Rovelli	Could Fast Radio Bursts or Cosmic Rays come from quantum-gravitational black hole tunnelling?
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9:50 - 10:40	X. Calmet	Quantum effects in black holes and singularities
10.40 - 11.10	<i>Coffee</i>	
11.10 - 12.00	H. L. Verlinde	Near-horizon effects and transfer of information across the horizon
12.00 - 12.50	A. Mazumdar	Towards Asymptotically Free Gravity
12.50 - 14.30	<i>Lunch</i>	

Afternoon Session Chair: Claus Lämmerzahl
Theory BH - Beyond Einstein

14.30 - 15.20	V. Frolov	Ghost-free gravity and black holes
15.20 - 16.00	<i>Coffee</i>	

Special

16.00 - 16.50	Presidential speeches	
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GR BH

16.50 - 17.40	V. Perlick	The shadow of Black Holes
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Outreach at Schlaues Haus Oldenburg

19:30 – 20:30	S. Britzen	Schwarze Löcher – Beobachtungen eines “unsichtbaren” Phänomens
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Thursday, 6.10.2016

Morning Session Chair: Jutta Kunz
Compact Stars

9.00 - 9:50	D. Doneva	Rotating neutron stars in alternative theories of gravity
9:50 - 10:40	A. Trova	Equilibrium configurations of rotating magnetized self-gravitating tori: influence of self-gravity and the organized magnetic field
10.40 - 11.10	<i>Coffee</i>	
11.10 - 12.00	A. Wojnar	Equilibrium and stability of relativistic stars in extended theories of gravity
<i>MHD</i>		
12.00 - 12.50	M. Moscibrodzka	3DGRMHD simulations of M87 and Sgr A*

12.50 - 14.30 *Lunch*

Afternoon Session Chair: Eva Hackmann
Special

14.30 - 15.20 H. Götschel Looking at Physics from a Gender Studies Perspective

MHD

15.20 - 16.10 J. Dexter GRMHD simulations of a black hole shadow in Sgr A* and M87

16.10 - 16.40 *Coffee*

16.40 - 17.30 C. Fendt Jet launching

Poster Session

17.45 *Refreshments will be provided*

Friday, 7.10.2016

Morning Session Chair: Saskia Grunau
GR BH

9.00 - 9:50 V. Cardoso Testing the no-hair hypothesis

9:50 - 10:40 E. Winstanley What is the ultimate fate of the charged black hole bomb?

10.40 - 11.10 *Coffee*

11.10 - 12.00 A. Aliev Black Hole Bomb in Five-Dimensional Minimal Ungauged Supergravity

12.00 - 12.50 S. S. Yazadjiev Classification theorems for static spacetimes with a photon sphere

12.50 - 14.30 *Lunch*

Afternoon Session Chair: Volker Perlick

14.30 - 15.20 P. G. Nedkova Black holes in external gravitational fields

15.20 - 16.10 C. Gruber Thermodynamic optimization of a Penrose process: an engineers' approach to black hole thermodynamics

16.40 - 17.30 J. Frauendiener Global simulation of the perturbations of a Schwarzschild black hole

End of the Conference