

Program

Sunday, 3 February 2019

17:00 – 21:00 Registration

from 18:30 *BUFFET SUPPER / Informal get together*

Monday, 4 February 2019

07:30 *BREAKFAST*

08:45 – 09:00 Eva Hackmann Wolfgang Duschl **Opening and Welcome**

09:00 – 09:45 Marek Abramowicz **Searching for Signals from Alien Civilizations**

09:45 – 10:30 Odele Straub **Observational signatures of strong gravity in accretion discs**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 11:45 Wolfgang Duschl **Synthetic Surveys of Super-Massive Black Holes**

11:45 – 12:10 Debora Lančová **Global GRRMHD simulation of thin accretion disk**

12:10 **Conference Photo** (in the foyer of the lecture hall)

12:30 *LUNCH*

Program

Monday, 4 February 2019

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| 14:00 – 14:25 | Roberto Oliveri | Self-similar accretion in thin discs around near-extremal black holes |
| 14:25 – 14:50 | Jiri Horak | Accretion disks around relativistic radiating stars |
| 14:50 – 15:15 | Posterflash | |
| 15:15 – 15:30 | Stefan Jorda | About the Wilhelm and Else Heraeus Foundation |
| 15:30 – 16:00 | <i>COFFEE BREAK</i> | |
| 16:00 – 18:00 | Postersession | |
| 18:30 | <i>HERAEUS DINNER at the Physikzentrum
(cold & warm buffet, free beverages)</i> | |

Program

Tuesday, 5 February 2019

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Paul Romatschke	Relativistic Hydrodynamics in Strong Gravity
09:45 – 10:30	Domenico Giulini	Generalised McVittie spacetime as a toy-model for the study of local mass/energy balances
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Volker Perlick	Modelling jets with force-free electrodynamics
11:45 – 12:10	Anabella Araudo	Truncation of AGN jets by their interaction with stellar clusters
12:10 – 12:35	Antonios Nathanail	Plasmoid formation in relativistic jets (global GR-MHD simulations)
12:35	<i>LUNCH</i>	
14:00 – 14:25	Baptiste Boutin-Basillais	Non-relativistic m-body figures of equilibrium
14:25 – 14:50	Banibrata Mukhopadhyay	Power of magnetically arrested advective flows and dichotomy between blazar classes
14:50 – 15:15	Cosimo Bambi	Testing strong gravity using X-ray reflection spectroscopy
15:15 – 15:45	<i>COFFEE BREAK</i>	
15:45 – 16:30	Vladimir Karas	Regular and chaotic motion in strong gravity
18:30	<i>DINNER</i>	

Program

Wednesday, 6 February 2019

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Johann Anton Zensus	Imaging Event Horizon Scale Structure in Nearby Active Galactic Nuclei with mm-VLBI
09:45 – 10:30	Andreas Eckart	The central light-year of the Milky Way: How stars and gas live in a relativistic environment of a super-massive black hole
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Luciano Rezzolla	On accretion flows on exotic compact objects
12:00	<i>LUNCH</i>	
13:30	Excursion	
17:30 – 18:15	Axel Brandenburg	Polarized gravitational waves from early universe hydromagnetic turbulence
18:30 – 20:00	<i>DINNER</i>	

Program

Thursday, 7 February 2019

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Daniela Pugliese	Accreting tori sequences: Ringed Accretion Disks
09:45 – 10:30	Claus Lämmerzahl	Accretion disks in axially symmetric space-times
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Oldrich Semerák	Perturbation of a Schwarzschild black hole by a rotating thin disc
11:45 – 12:30	Eva Hackmann	Equilibrium configurations of charged fluids in strong gravity
12:30	<i>LUNCH</i>	
14:00 – 14:25	Yosuke Mizuno	Testing Theories of Gravity via Shadow Images of a Magnetized Accretion Flow onto a Black Hole
14:25 – 14:50	Hector Raul Olivares Sanchez	Telling black holes and boson stars apart using strong field images
14:50 – 15:15	Matheus do Carmo Teodoro	Simulations of accretion processes onto boson stars
15:15 – 15:45	<i>COFFEE BREAK</i>	
15:45 – 16:30	Monika Moscibrodzka	Towards Understanding Black Hole Accretion and Jet Launching
16:30 – 16:55	Sergio Gimeno-Soler	Magnetized accretion disks around Kerr black holes with scalar hair
16:55 – 17:20	Alejandro Cruz-Osorio	Non-linear evolution of magnetized-torus-BH: Comparison between magnetic field approaches
18:30	<i>DINNER</i>	

Program

Friday, 8 February 2019

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Jose Antonio Font	Magnetised self-gravitating disks around black holes
09:45 – 10:30	Tobias Illenseer	Similarity solutions for self-gravitating accretion disks
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	John Hawley	Tilted Disks Around Black Holes: Investigating the Alignment Mechanism
11:45 – 12:30	Marcus Brüggen	Signatures of accretion in the radio sky
12:30 – 13:00	Eva Hackmann Wolfgang Duschl	Poster awards and concluding remarks
13:00	<i>LUNCH</i>	

End of the seminar and **FAREWELL COFFEE** / Departure

Please note that there will be no dinner at the Physikzentrum on Friday evening for participants leaving the next morning.