COST conference

99 years of Black Holes – from Astronomy to Quantum Gravity

Agenda

Monday, May 19

19:00 Welcome Reception
Steigenberger Hotel

Tuesday, May 20

09:00 - 09:30 Registration

09:30 - 09:50 Welcome (A. Alberdi, S. Britzen, COST office)

09:50 - 10:30 Jürgen Renn (MPI für Wissenschaftsgeschichte, Germany) (Review):
The Genesis of General Relativity - from Philosophy to Cosmology

10:30 - 10:50 Eduardo Ros (MPI für Radioastronomie, Germany):
Supermassive Black Holes

10:50 - 11:30 Lutz Wisotzki (Leibniz-Institut für Astrophysik Potsdam, Germany) (Review):
Demographics of supermassive black holes in AGN

11:30 - 12:00 Coffee break

12:00 - 12:15 Krisztina Gabanyi (Konkoly Observatory of the MTA, Hungary):
European VLBI Network observations of a candidate dual supermassive black hole

12:15 - 12:30 Edi Bon (Astronomical Observatory Belgrade, Serbia):
Spectroscopically Resolved Subparsec supermassive binaries

12:30 - 12:45 Davide Gerosa (University of Cambridge (DAMTP), UK):
Missing black holes in brightest cluster galaxies as evidence for the occurrence of superkicks

12:45 - 13:00 Vladimir Bozhilov (Dept. of Astronomy, Sofia University, Bulgaria):
Optical Photopolarimetry of Blazar OJ287
13:00 - 14:30 Lunch

14:30 - 14:45 Lyuba Slavcheva-Mihova (Institute of Astronomy and NAO, Bulgaria):
Black hole mass estimates of a sample of flat spectrum radio quasars

14:45 - 15:00 Luka Popovic (Astronomical Observatory, Serbia):
Supermassive binary black hole and gravitational microlensing

15:00 - 15:30 Coffee break

15:30 - 15:50 Xavier Calmet (University of Sussex, UK):
Quantum Black Holes, from astrophysics to particle physics

15:50 - 16:30 Georgi Dvali (LMU-MPI, NYU, Germany) (Review):
Black hole's quantum portrait

16:30 - 17:10 Steve Giddings (University of California, Santa Barbara, USA) (Review):
Black holes, quantum information, and the foundations of physics

17:10-17:25 Roberto Casadio (Bologna University and INFN)
Horizon wavefunction and the quantum hoop conjecture

17:25-17:40 Piero Nicolini (FIAS & GU, Frankfurt, Germany)
Black holes and the generalized uncertainty principle

Wednesday, May 21

09:00 - 09:20 Andreas Eckart (I. Physik / Universität zu Köln, Germany):
The Galactic Center Black Hole and its Environment

09:20 - 10:00 Herman Verlinde (Princeton University, USA) (Review):
Black Holes: What makes them attractive?

10:00 - 10:15 Arne Grenzebach (ZARM, Universität Bremen, Germany):
The Shadow of Black Holes: Analytically and Cosmologically

10:15 - 10:30 Norman Gürlebeck (ZARM, University Bremen, Germany):
A no-hair theorem for black holes surrounded by matter

10:30 - 10:45 Claus Laemmerzahl (ZARM, University of Bremen, Germany):
Regular Black Holes: Properties and observables

10:45 - 11:15 Coffee break
11:15 - 11:30  **Bathomiej Kaminski** (Center for Theoretical Physics, Polish Academy of Science, Poland):

*Simulations of magnetised plasma accretion onto a Kerr black hole*

11:30 - 11:45  **Michal Zajacek** (Charles University Prague)

*Galactic Centre Mini-spiral: Interaction Modes of Neutron Stars*

11:45 - 12:00  **Antonia Micol Frassino** (Frankfurt Institute for Advanced Studies, Germany):

*Triple Points and Reentrant Phase Transitions in Lovelock Thermodynamics*

12:15 - 12:30  **Elizabeth Winstanley** (The University of Sheffield)

*Vacuum polarization for higher-dimensional black holes*

12:30 - 14:00  **Lunch**

14:00 - 14:40  **Johann Anton Zensus** (MPI für Radioastronomie, Bonn, Germany) (Review):

*Peering into the heart of AGN with millimeter VLBI*

14:40 - 14:55  **Carlos Herdeiro** (Aveiro University, Portugal):

*Kerr Black Holes with scalar hair*

14:55 - 15:10  **Laurentiu Ioan Caramete** (Institute of Space Science, Romania):

*Micro black hole signatures in air, water and ice*

15:10 - 15:25  **Ocatvian Micu** (Institute of Space Science, Bucharest, Romania)

*Quantum black hole decay signatures in the UHECR data*

15:25 - 16:05  **Vincent Fish** (MIT Haystack Observatory, USA) (Review):

*The Event Horizon Telescope: Present Results and Future Capabilities*

16:05  **Coffee break & Tour**

**Thursday, May 22**

09:00 - 09:20  **Anthony Rushton** (University of Oxford, UK):

*Stellar Black Holes*

*Jet production in the nearby universe: testing black hole feedback across the Eddington scale*

09:20 - 10:00  **Josep Maria Paredes** (Universitat de Barcelona, Spain) (Review):

*The high energy-radio connection in stellar black holes*
10:00 - 10:15  Agnieszka Janiuk (Center for Theoretical Physics, Polish Academy of Science, Poland): 
Astro-Black Holes at all scales

10:15 - 10:30  Fiamma Capitanio (INAF-IAPS, Italy): 
The behavior of the BHC 4U1630-472 during the 2006-2010 outbursts

10:30 - 10:45  Stephanie Dörschner (Universität Göttingen, Germany): 
Star formation and accretion in the circumnuclear disks of active galaxies

10:45 - 11:00  Marianne Heida (SRON Netherlands Institute for Space Research, The Netherlands): 
Near-infrared counterparts of ULXs - towards dynamical mass measurements

11:00 - 11:30  Coffee break

11:30 - 12:10  Luciano Rezzolla (Institute for Theoretical Physics, Frankfurt, Germany) (Review): 
What numerical relativity can teach us about black holes

12:10 - 12:25  Chen Xuhui (Institut für Physik und Astronomie, Potsdam): 
Particle diffusion and localized acceleration in inhomogeneous AGN jets

12:25 - 12:40  Manuel Torres (SRON, The Netherlands): 
The GBS, a search for quiescent LMXBs through the mist of the Milky Way

12:40 - 12:55  Arman Tursunov (Silesian University in Opava, Czech Republic): 
QPOs of charged particles moving around Schwarzschild black hole in magnetic field

13:00 - 14:30  Lunch

14:30 - 14:45  Antonios Nathanail (Academy of Athens, Greece) 
Black Hole Magnetospheres and the Orthogonal GRB model

14:45 - 15:25  Christopher Reynolds (University of Maryland, USA) (Review): 
Supermassive Black Hole spin : The X-ray View

15:25 - 16:00  Coffee break

16:00 - 16:20  Felix Mirabel (CEA-Saclay-France & CONICET-Argentina, France): 
Cosmic evolution of stellar black holes

16:20 - 16:40  Antxon Alberdi (IAA-CSIC, Spain): 
Accretion and Star Formation in the Nuclear Regions of ULIRGs

16:40 - 17:00  Conference conclusions

19:00  Conference dinner