



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

chair Eduardo Ros

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

chair Xavier Calmet

chair Piero Nicolini

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

chair Andreas Eckart

chair Anthony Rushton

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): <i>The behavior of the BHC 4U1630-472 during the 2006-2010 outbursts</i>
10:30 - 10:45	Stephanie Dörschner (Universität Göttingen, Germany): <i>Star formation and accretion in the circumnuclear disks of active galaxies</i>
10:45 - 11:00	Marianne Heida (SRON Netherlands Institute for Space Research, The Netherlands): <i>Near-infrared counterparts of ULXs - towards dynamical mass measurements</i>
11:00 - 11:30	Coffee break
11:30 - 12:10	Luciano Rezzolla (Institute for Theoretical Physics, Frankfurt, Germany) (Review): <i>What numerical relativity can teach us about black holes</i>
12:10 - 12:25	Chen Xuhui (Institut für Physik und Astronomie, Potsdam): <i>Particle diffusion and localized acceleration in inhomogeneous AGN jets</i>
12:25 - 12:40	Manuel Torres (SRON, The Netherlands): <i>The GBS, a search for quiescent LMXBs through the mist of the Milky Way</i>
12:40 - 12:55	Arman Tursunov (Silesian University in Opava, Czech Republic): <i>QPOs of charged particles moving around Schwarzschild black hole in magnetic field</i>
13:00 - 14:30	Lunch
14:30 - 14:45	Antonios Nathanail (Academy of Athens, Greece) <i>Black Hole Magnetospheres and the Orthogonal GRB model</i>
14:45 - 15:25	Christopher Reynolds (University of Maryland, USA) (Review): <i>Supermassive Black Hole spin : The X-ray View</i>
15:25 - 16:00	Coffee break
16:00 - 16:20	Felix Mirabel (CEA-Saclay-France & CONICET-Argentina, France): <i>Cosmic evolution of stellar black holes</i>
16:20 - 16:40	Antxon Alberdi (IAA-CSIC, Spain): <i>Accretion and Star Formation in the Nuclear Regions of ULIRGs</i>
16:40 - 17:00	Conference conclusions
19:00	Conference dinner

chair Antxon Alberdi

chair Luciano Rezzolla

