Overview

MP0905 „Black Holes in a Violent Universe“

How does COST work?

What does it mean scientifically?
   The Working Groups (WGs)

Financially? The many ways COST supports networking
How COST works

Activities =
- WG meetings (like today)
- Conferences
- Training-Schools
- etc.

Science
- WG1,
- WG2,
- WG3,
- WG4
How COST works

Activities =
WG meetings (like today)
Conferences
Training-Schools
etc.

Science
WG1, WG2, WG3, WG4
It’s all about Black Holes .....
...... and synergies !!!!
What's the goal?

• To enhance the understanding of the BH-phenomenon and its impact on the evolution of our Universe

• To study the fundamental laws of nature using an multi-disciplinary and multi-dimensional approach to BH-research

• To use BHs as „laboratories“ to test new physical concepts
• Gravity – Quantum Gravity (all BHs)
• Accretion (Quantum BHs, Stellar, Sgr A*, Supermassive BHs)
• Jets (all BHs)
• Gravitational Waves & Binary Black Holes
  – Find the candidate SMBBHs
  – Models – what kind of radiation do we expect?
  – How do we recognize them
  – Multiwavelength campaigns
• BH cosmological evolution (accretion / merging), how and when were they „born“?
  – Co-evolution
  – Early Universe
The 4 Working Groups

**WG1:**
Quantum BHs
Xavier Calmet
University of Sussex

**WG2:**
Galactic Centre BH
Andreas Eckart
I. Physikalisches Inst. Universität Köln

**WG3:**
Stellar BHs / Pulsars
Anthony Rushton
ESO fellow at Onsala Space Observatory

**WG4:**
Supermassive BHs
Eduardo Ros
University of Valencia

Robert Ferdman
Activities =
WG meetings (like today)
Conferences
Training-Schools
etc.

Science
WG1,
WG2,
WG3,
WG4
COST (European Cooperation in Science and Technology) is one of the longest-running European instruments supporting cooperation among scientists and researchers across Europe.
Participating Countries : 19
Proposer : DE
AT, BE, CZ,
ES, FI, FR,
GR, HU, IE,
IT, PL, PT,
RO, RS, SI,
SE, UK, DK

Plus: Australia
In preparation: South-Africa, Georgia, Russia, etc.
Please sign the participants list for every day of this meeting!
How COST works

Activities =
- WG meetings (like today)
- Conferences
- Training-Schools
- etc.

Science
- WG1,
- WG2,
- WG3,
- WG4
Activities

Scientific Strategic Meetings 2

Winter Schools 2

Conferences Workshops 3 / 2

Liaison & Interaction

Final Symposium

Management Meetings 1 per yr

Core group Meetings 2 per yr

Working Group Meetings

STSMs 10 per yr

Outreach / Gender Activities

Black Holes in a Violent Universe

Final Symposium

Management Meetings 1 per yr

Core group Meetings 2 per yr

Working Group Meetings

STSMs 10 per yr

Outreach / Gender Activities

Liaison & Interaction

Conferences Workshops 3 / 2

Winter Schools 2

Scientific Strategic Meetings 2
Prel. schedule

- 2010: next WG meeting in Nov. Valencia

- 2011: 2 conferences + combined WG meeting

- 2011: still open 2. WG meeting (independent) – suggestions welcome

- 2012: 2 schools + WG meetings
In case you would like to visit another European institute to do great science ....
• **Website** ([http://www.mpifr-bonn.mpg.de/div/vlbi/COST](http://www.mpifr-bonn.mpg.de/div/vlbi/COST))
  
  **Public**
  
  • All information about the scientific activities: calls, conference announcements, programs, **presentations** *(pdf-file of your presentation at this WG meeting wanted!!)*
  • Contains all activities of the Action of interest to the public, e.g. science description *(in all languages)*, conferences, events, Girls Days, etc.
  • Link to COST

  **Internal**
  
  • Password protected
  • Action coordination on all levels

  **Gender Forum**
  
  • Communication platform for female scientists *(Role model, etc.)*
  • To present „Astronomers at work“
  • Link to IAU working group „Women in Astronomy“

• **Publications**
  
  • Scientific *(COST acknowledgement)*
  • Wider public
1. Objectives
   • to contribute to the scientific aims of the Action
   • to strengthen the existing network and to foster collaboration

2. The Applicant
   • Employed by the COST institute active in the Action

3. Home and Host Institute

   COST country ➔ COST / approved non-COST country
   Approved Near Neighbour country ➔ COST country
Online registration tool

• CV
• Publication list
• Letter of recommendation
• Letter of home institute support

Download registration

STSM Coor.

- e-mail
- MC Approval per e-mail

Host

Assessment

Grant Letter

Grant Letter signed by applicant

• the attached request has been accepted
• a grant of XX€
• the host has accepted the proposal

Payment Request Form

1

2

3

Applicant

Grant Holder
STSM Scientific Report
- Purpose of the STSM
- Description of done work
- Description of results
- Future collaboration with HOST
- Foreseen publications
- HOST Confirmation of the STSM
- Other

Applicant

Within 4 weeks

Completed Payment Request Form + Summary of scientific report (1 page)

After the STSM

Payment

Applicant

STSM Coor.

Completed Payment Request Form + Summary of scientific report (1 page)

Approval of final report

Notice of completion:
- STSM has been complied
- Scientific report has been accepted
- The amount of XX€ can be paid

Grant Holder

Completed Payment Request Form

e-mail
How COST works

Activities =
WG meetings (like today)
Conferences
Training-Schools
etc.
# Programme for the 1st WG's meeting:

## June 24

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Person</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00-10:30</td>
<td>Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Welcome</td>
<td>S. Britzen &amp; A. Zensus</td>
<td>0.02</td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>Action MP0905</td>
<td>S. Britzen</td>
<td>0.02</td>
</tr>
<tr>
<td>11:30-12:15</td>
<td>Quantum Black Holes</td>
<td>X. Calmet</td>
<td>0.02</td>
</tr>
<tr>
<td>12:15-12:45</td>
<td>Stellar Black Holes</td>
<td>A. Rushton</td>
<td>0.02</td>
</tr>
<tr>
<td>12:45-14:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00-14:45</td>
<td>Galactic Centre Black Holes</td>
<td>A. Eckart</td>
<td>0.02</td>
</tr>
<tr>
<td>14:45-15:30</td>
<td>Supermassive Black Holes</td>
<td>E. Ros</td>
<td>0.02</td>
</tr>
<tr>
<td>15:30-16:00</td>
<td>Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16:00-18:00</td>
<td>WGs meetings (separately)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG1</td>
<td>X. Calmet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG3</td>
<td>A. Eckart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG4</td>
<td>E. Ros</td>
</tr>
</tbody>
</table>

## June 25

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Person</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-10:30</td>
<td>WGs meetings (separately)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG1</td>
<td>X. Calmet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG3</td>
<td>A. Eckart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WG4</td>
<td>E. Ros</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00-13:00</td>
<td>Forum Synergy</td>
<td>S. Britzen</td>
<td>0.02</td>
</tr>
<tr>
<td>13:00-14:00</td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:00-15:00</td>
<td>Organizational issues</td>
<td>I. Rottmann &amp; V. Tegethoff</td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td>End</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Let’s get started ...