



VNIVERSITAT
DE VALÈNCIA

November 16, 2010
2nd COST MC Meeting
Eduardo Ros (Univ. Valencia)

SMBH WG4 REPORT



Review

- Group formed at the 1st Meeting on June 25, further on November 15
- Largest number of participants (over 25 both times)
- Several STSM
 - Gergely (HU) to MPI for Radio Astronomy, DE
 - Boeck (DE) to Univ. Valencia, ES
 - Fromm (DE) to Univ. Valencia, ES
 - Meliani (BE) to Univ. Valencia, ES
 - Karouzos (DE) to Hertfordshire, UK
 - ...

June 25th Meeting

- 20'+20' of discussion
- FRI/II by simulated relativistic flows (Keppens 20')
- X-ray and γ -ray emission in AGN (Niedzwiecki 15')
- X-ray and γ -ray observations (Kadler 15')
- AGN studied by spectral lines (Popovic 15')
- GAIA and QSOs (Antón 15')
- SMBH vicinity with radio interferometry (Lobanov 20')
- BH catalog of the nearby universe (Caramete 15')
- BBH theory (Gergely 15')
- Modeling BBH with VLBI jet trajectories (Roland 15')

November 15th Meeting

- BH mass estimates and BH demographics (Vestergaard, 15')
- The INTEGRAL Sky (Panessa, 15')
- Jet simulations (Meliani, 15')
- Dynamical inferences on SMBH from BLR spectra (La Mura, 15')
- AGN Samples, gamma & radio (Mantovani, 15')
- Star formation vs accretion in AGN (Pérez-Torres, 15')
- WG1+WG4 SMBH & pulsar timing (Verbiest, 25'+20')
- Radio-Gamma Connection, F-GAMMA (Angelakis/Fuhrmann 25')
- Discussion on magnetic fields (Alberdi, 15')
- Final Discussion

Discussion on “goals” or “deliverables”

- (Text) book on SMBH
- Basis for deeper networking (e.g., further applications to FP7/FP8 programs)
- Organising a (training) school
 - BH powered astrophysics
- Sci. workshops
 - Multi-band view on AGN (away from colour blindness), and beyond photons
- Input for the Outreach working group (e.g., news website)
- Synergy with parallel efforts (e.g., GAIA QSO WG)
- Development of joint efforts with industry (developments, techniques; e.g., GRAVITY)
- Public talks (attached to WG meetings)

Synergy topics

⦿ WG1

- Formation of BH in the early universe and high-z QSOs

⦿ WG2

- Jet formation and evolution
- Role of magnetic fields
- Pulsar timing and BBH coalescence
- Multi-band approach

⦿ WG3

- The GC nature and the link between stellar, intermediate, SgrA*-like, and SMBH
- Multi-band approach