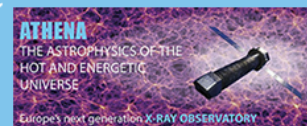


ATHENA TWG WORKSHOP

Milano - March 14-15, 2016 - Cupola Fiore

Osservatorio Astronomico di Brera
via Brera 28, 20121



First day: Monday 14th March: 2 p.m. to 6:30 p.m.

2:00 p.m. - **Welcome address** (*G. Tagliaferri OAB/INAF Director*)

2:05 p.m. - **Introduction - Scope of the meeting, Role of the TWG, Sharing of the activities, Organization** (*G. Pareschi, R. Willingale*)

2:30 p.m. - **Athena Optics: general activities on the finalization of missions and Optics:**

- Athena implementation Athena Development program and the optics implementation (*Mark Ayre, ESA*)
- ATHENA Mirrors: Technology consolidation program & production plan (*Marcos Bavdaz*)

3:30 p.m. - **Possible contributions from international partners:**

- NASA – (*R. Petre*)
- JAXA – (*H. Matsumoto TBC*)

4:00 p.m. – Coffee Break

4:30 p.m. - **Implementation & Integration:**

- SPO Module opto-mechanical design & implementation (*Max Collon/Cosine*)
- Alignment of mirror modules I (*D. Vernani, RUAG*)
- Alignment of mirror modules II (*G. Valsecchi, Media Lario*)

5:30 p.m. - **Scattering & Stray X-rays:**

- The baffling and stray – light issues and solutions (*I, R. Willingale, Leicester Univ*)
- The baffling and stray – light issues and solutions (*II, G. Cusumano, INAF/IASF-Palermo*)
- Baffling implementation after the activities performed for IXO (*G. Vacanti, Cosine*)
- The scattering issue: models and experiments (*Spiga/Ferreira TBC*)
- The science point of view (I): diffuse sources (*S. Molendi, INAF/IASF-Milano*)
- The science point of view (II): deep and extended surveys (*A. Comastri, INAF/OABologna*)

8:30 p.m. Social Dinner

Second day: Tuesday 15th March: 9,30 a.m. to 4 p.m.

9:30 a.m. - **X-ray tests and calibrations:**

- Calibration products, responsibilities, resources (*D. Lumb, ESA - TBC*)

- Mirror calibration plan within the ATHENA calibration plan (*R. Willingale, Leicester Univ*)
- Current and future activities at Panter (*V. Burwitz, MPE*)
- A large area X-ray collimator for ATHENA (*B. Menz, MPE*)
- BeatriX as a testing, alignment and calibration facility at the industry premises (*D. Spiga, OAB/INAF*)

10:30 a.m. - Mirror performance modelling:

- Error Budget (*R. Willingale*)
- SW under development (*D. Spiga*)
- High energy response. Specification and requirements (*D. Willingale*)

11 a.m. - Coffe Break

11:30 a.m. - Transmission of soft proton through the mirror system:

- Introduction to the problem (*R. Willingale*)
- Proposed implementation (*ESA, Mark Ayre, TBC*)
- Review on simulations and experimental activities needed (*D. Spiga, S. Molendi*)

12:30 p.m. Lunch (on site)

2:30 p.m. - Contributed talks

3:30 p.m. - Rapporteur talk (*G. Pareschi*)- Discussion – Closing remarks, Track of actions