

EUROPEAN SPACE AGENCY

ASTRONOMY WORKING GROUP

Recommendation on the Level of Resources 2006-2010

At its 118th meeting held on 13-14 May 2004 at ESA Headquarters, Paris, the Astronomy Working Group (AWG) discussed the draft document “Level of Resources 2006-2010” of the Executive proposing to increase the level of resources of the Science Programme by about 25% in 3 years starting in 2007. The AWG enthusiastically supports the proposed strengthening of the ESA Science Programme. Major milestones in astrophysics in the coming decades will be the detection and characterization of Earth-like planets and life elsewhere, as well as the identification of dark matter and energy.

The AWG reconfirms the scientific excellence of the astronomy component of the present science programme. It will continue to open unique opportunities for the European astronomy community to major scientific breakthroughs.

In line with ASTRO(2003)13 on the reconstruction of the Cosmic Vision Programme, the AWG confirms unanimously the recommendation of an early implementation of the GAIA mission within the constraints of the present programme.

Within an increase of the level of resources as proposed by the Executive, *the AWG unanimously recommends the implementation of the Eddington mission as the highest priority*. This mission will detect and characterize exo-planets, including Earth-like planets, and will achieve major progress in our fundamental understanding of stars. The results of the industrial definition studies as reported at the meeting, have confirmed that Eddington is technically mature and within the budgetary envelope of a Flexi mission and can be implemented in a timely manner.

The AWG also strongly recommends SMART-3 as the most important stepping stone towards space interferometry (Darwin) and, possibly, X ray spectroscopy (XEUS). This will allow Europe to keep its strong position in the field of extra-solar planetary science and to lead the required technology development for precision formation flying and nulling interferometry.