



A European calorimeter for the next X-ray observatory

(26-27 October 2004, Utrecht)

Introduction

See viewgraphs

Main science interest

See viewgraphs including presentation by Juhani Huovelin (Helsinki)

Technology

See viewgraphs including presentation by Kazu Mitsuda (JAXA/ISAS)

Status and commonalities for magnetic calorimeters

See viewgraphs by Christian Enns

Status and common technology for STJs

See viewgraphs by Didier Martin

Summary of science drivers

Based on the science presentations an overview with related instrument capabilities was compiled (see viewgraphs by den Herder). This list needs further refinements but can be used as starting point. Taking into account the US interest for a calorimeter optimized around the Fe-K lines, the case for a cryogenic instrument optimized at low energy was agreed. The science justification will be summarized (to be coordinated by Bleeker and Barcons) as preparation for further discussions with our US colleagues.

Instrument development

A development plan for a prototype cryogenic instrument based on TES calorimeters was presented (see second presentation by de Korte). Based on the presented breakdown potential interest of different partners was identified. First this breakdown needs to be specified in more detail including the top level requirements and the technological readiness level of the different (sub-)units.

Based on the potential interest and the further specifications detailed discussions (face-to-face meetings) will be organised.

It is important to stay in close contact with the ESA/NASA developments as this may affect the feasibility of a 2nd cryogenic instrument on XEUS. In addition the development of such European instrument may also development at ESA (e.g. required resources).

Status ESA

See viewgraphs by Lumb

Conclusions and any other business

See viewgraphs by den Herder: it was agreed to have a second meeting next spring to take stock of the situation

Planning

SRON is planning to prepare a draft 'prototype definition document' before the end of the year following which we hope to have face to face meetings with most of you.

The viewgraphs will be made available shortly on a web site.

Distribution

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• Finland

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- Martin Turner (Leicester)
- Mat Page (MSSL)
- Ian Hepburn (MSSL)
- Alan Smith (MSSL, day 2)

• Japan

- Kazu Mitsuda (JAXA/ISAS)

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