

March 22<sup>nd</sup> 2013

## Announcement: **First UK LOFT Science Meeting**

*London, June 24-25 2013  
Royal Astronomical Society,  
Burlington House,  
London*

Dear Colleague,

Apologize if you receive this email more than once. Please, distribute this announcement among your colleagues.

We wish to point to your attention to the **First UK Science Meeting** dedicated to *LOFT* (*Large Observatory for X-ray Timing*), which will be held in London on June 24 and 25 2013, at the Royal Astronomical Society.

*LOFT* is one of the five missions that are currently considered by ESA as M3 candidates, for a launch in 2022-2024. The main instrument that *LOFT* will carry on board is a Large Area Detector (LAD) with 10 square meters of effective area, i.e. 20 times the collecting area of the *Rossi X-ray Timing Explorer (RXTE)*. It will operate in the 2-30 keV range, holding the capability to revolutionise studies of variability from X-ray sources. The LAD detectors have unprecedented spectral resolution for a timing mission -- down to 200 eV -- giving the mission approximately CCD-class spectral resolution. This will allow one to carry out timing analysis in emission lines as well as fast spectral studies in addition to the continuum timing that has traditionally been carried out so far. The LAD will be a UK-based effort, led by MSSL/UCL with the cooperation of SRC (Leicester).

Additionally, *LOFT* will carry on board a Wide Field Monitor (WFM) with few mCrab sensitivity in a day, 5 arcmin angular resolution, and a 3 steradian field of view, which will operate in the 2-50 keV energy range. The WFM will provide instantaneous, soft X-ray coverage of about 1/4 of the sky -a field of view larger of any past X-ray monitor. This will open the opportunity to discover new, rare classes of transients, especially in conjunction with the variability surveys at longer and shorter wavelengths set to start in the near future.

With its 20 times leap in effective area, *LOFT* has the capability to make dramatic advances and open up new fields in X-ray astronomy. We envision *LOFT* being of great value to studies of X-ray binaries, active galactic nuclei, cataclysmic variables, pulsars, active stars, novae, gamma-ray bursts, magnetars, and unknown classes of transients, but we also think there may be ideas out there we have not thought of yet.

The aim of this meeting is to strengthen the activities of the LOFT UK community and to stimulate new collaborations and ideas.

We hope you will join the meeting, to learn more about LOFT and to discuss the LOFT impact in your field of research.

The meeting is sponsored by STFC and the RAS.

Meeting venue: **Lecture theatre of the Royal Astronomical Society**, at Burlington House, London (near Piccadilly):

<http://www.ras.org.uk/about-the-ras/burlington-house>

see also:

<http://www.ras.org.uk/events-and-meetings/ras-meetings/226> for directions.

More information about the meeting, registration, and abstract submission is available on the meeting website:

<http://www.isdc.unige.ch/loft/index.php/ras2013-home>

The abstract submission deadline is **May 16, 2013**

Looking forward to see you at the **First UK LOFT Science Meeting**

Kind regards

Silvia Zane and Roberto Mignani, on behalf of the SOC and the LOFT consortium

**SOC members:**

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Roberto Mignani (MSSL, UCL)  
Phil Charles (Southampton)  
Nils Anderson (Southampton)  
Andrew Fabian (Cambridge)  
Julian Osborne (Leicester)  
Paul O'Brien (Leicester)  
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