

# Outcome of the XXL meeting Issues for next XMM AOs

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# **An XXL extragalactic survey: prospects for the XMM next decade 14-16 April 2008, Paris**

- Bring together scientists interested in a  
~100 deg<sup>2</sup> extragalactic survey with XMM
- Workshop : 57 participants
- Presentations available at the workshop  
website:  
<http://www.astro.ulg.ac.be/RPub/Colloques/XXL/index.html>

# Goals of the meeting

- Evaluate the science cases for
  - Clusters
  - AGN
  - Galaxies
- Examine the technical issues
- Address the multi- $\lambda$  and spectroscopic follow-up

# Contents

- Review of the existing XMM surveys (serendipitous or not)
- Design your ideal XMM survey, assuming 10-20 Ms (clusters, AGN, galaxies)
- Session on the importance of good cluster mass determination for cosmology
- Presentation of 4 SZ instruments and surveys
- Input about SWIRE, Herschel, HSC, and spectro f-up
- A number of 'interesting regions' were 'advertised'
- Presentation of the new Mosaic mode

# Main conclusions

- Having a contiguous and uniform survey is essential for :
  - LSS
  - Monitoring correctly selection effects
  - Uniform multi- $\lambda$  coverage
- A 50 deg<sup>2</sup> with 40 ks is favoured over 200 deg with 10 ks (similar cosmological constraints)
  - better cluster masses
  - better spectral characterisation fo AGN
  - will enable measurements of cluster scaling laws at  $\sim 3$  keV out to  $z \sim 1$
  - (very different from the eRosita surveys)
- At least 2 sky areas (maybe 4)

# Summary

- It is a 20 Ms programme (~ 1 year operations)
- Several ~ > 10 Ms programmes have been proposed at the XMM “next decade” 2007 workshop
- These make really great use of the unrivalled sensitivity and PSF of XMM
  - => Treasury Programmes**
- It's the good time time to initiate such programmes
  - very good knowledge of XMM capabilities now
  - XMM's health is good
  - New mosaic mode
- No other such opportunity will be available for the next 10 years at least

# Question

- How to enable XMM ELPs extending (i.e. guaranteed) over several AOs ?
  - Cannot be fulfilled by repeated VLPs
- Get an answer by AO8 ?

# Example: the CFHT Large Programmes

- August 2007: AO for LPs using up to 40% of the total time available over 4 years
  - all time may not necessarily be used
  - all time may be attributed to a single programme
  - can end up with no programme at all selected
- Spring 2008: Independent committee (not the normal TAC) appointed by the SAC
  - 7 members
  - ranking of the proposals
  - the SAC will validate the final evaluation

End