



Iacopo Bartalucci

Education :

- PhD University Tor Vergata, Rome
- Post Doctorate 2014-19 CEA Saclay, ERC Fellow, PI Monique Arnaud
- Post Doctorate 2019-Today Milan INAF-IASF

Iacopo Bartalucci - Past activity

Science Themes

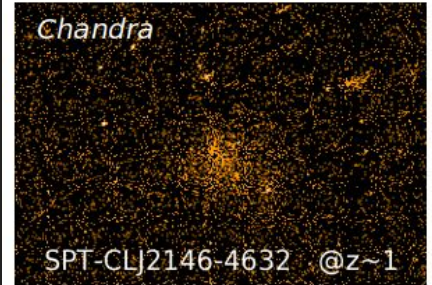
- Galaxy clusters
 - Thermodynamical properties at high z and in their outskirts
 - Evolution

Methods

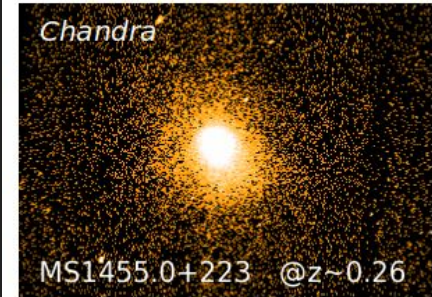
- Chandra & XMM/Newton
- Combining high resolution X-Ray and SZ observations (NIKA2)

$$S_x \propto (1+z)^{-4}$$

Chandra



Chandra



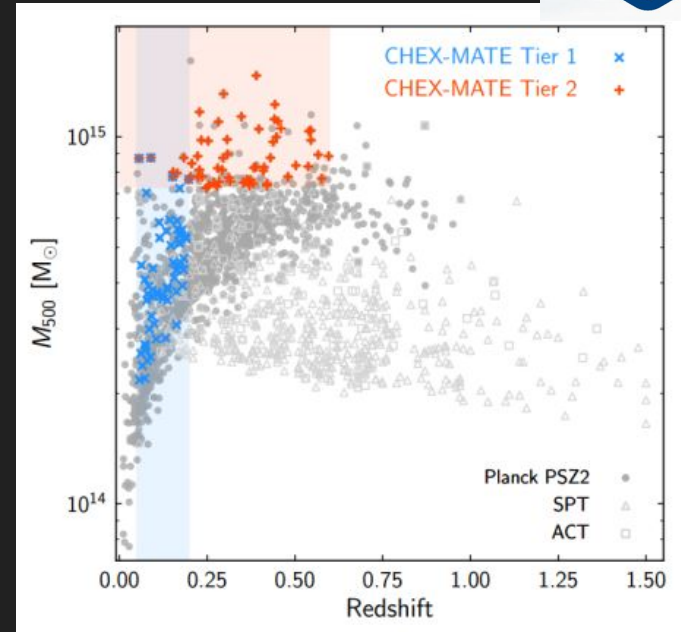
Iacopo Bartalucci - Present activity

Aims :

Defining a local reference sample for cluster evolution studies

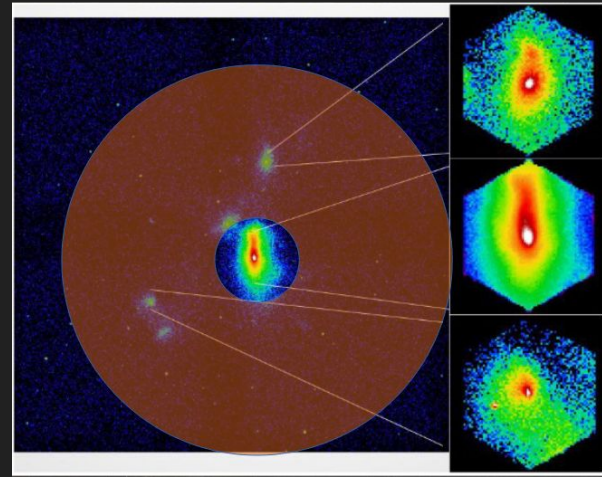
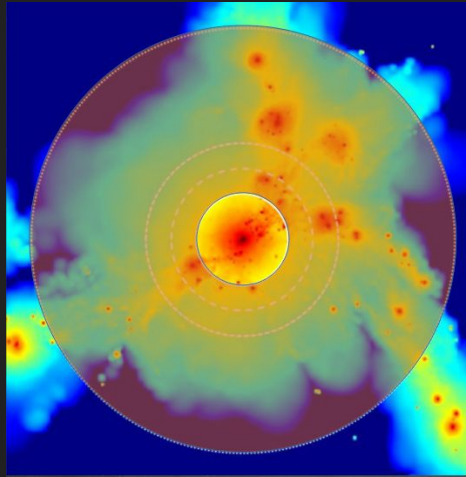
Method :

Studying the properties of 118 clusters selected with Planck and observed by XMM



Iacopo Bartalucci - Context of Athena

Testing the observational capabilities of X-IFU and WFI for very faint galaxy cluster outskirts



Aim at the school : characterising thermodynamic properties of outskirts with X-IFU



Alexei Molin

Education :

- M2 - Master student Observatoire de Paris
“Design of an X-ray collimator for the future calibration of X-IFU and the investigation of observation of gravitational redshift with X-IFU”
under the supervision of Francois Pajot and Etienne Pointecoteau (IRAP)

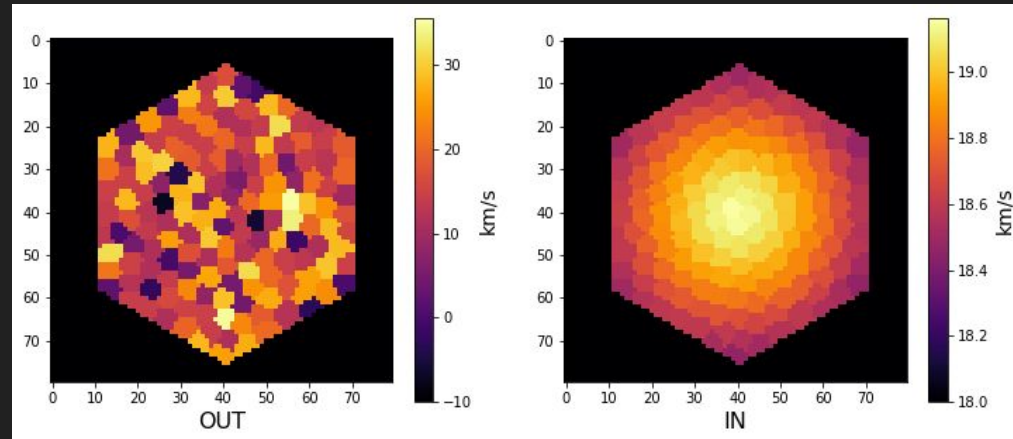
Alexei Molin - Current activity

Science Themes

- Galaxy clusters
 - dynamical properties: the mass

Methods

- Observations of gravitational redshift with X-IFU



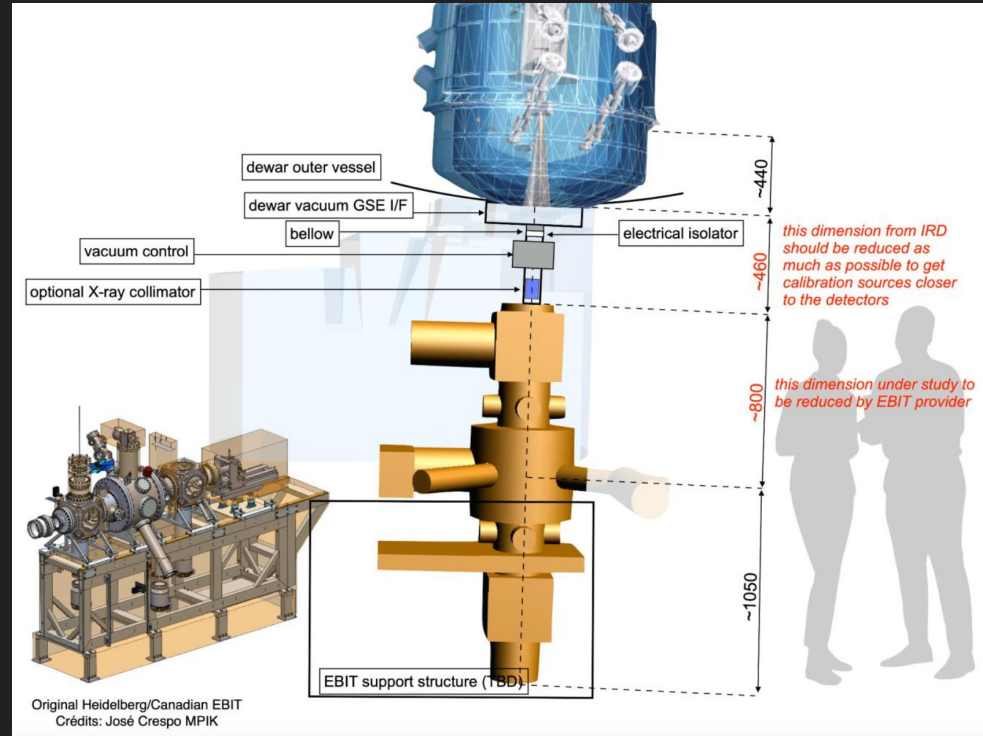
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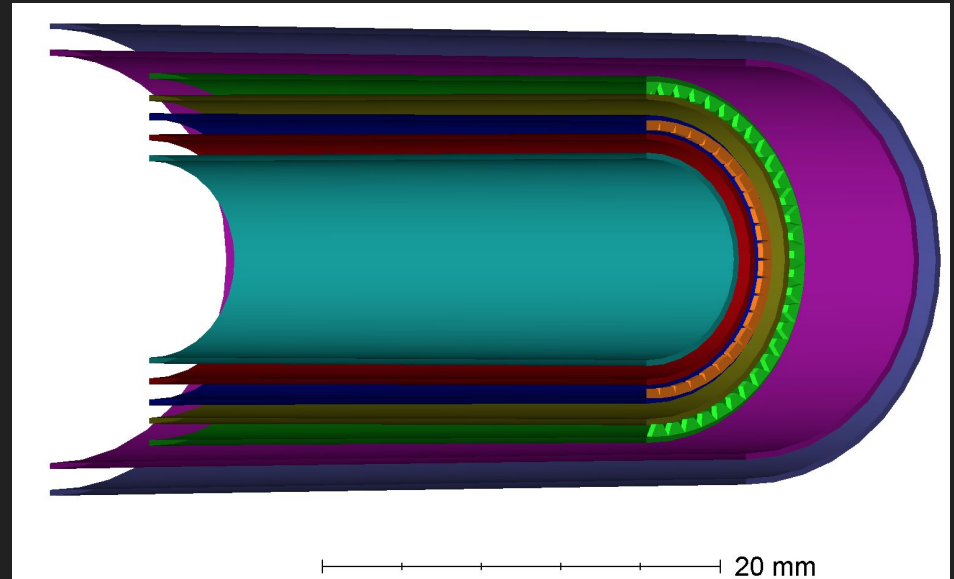
Alexei Molin - Current activity

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- Galaxy clusters
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Alexei Molin - Context of Athena

Future perspectives:

Continuing collimator design and possibly test it in reality at IRAP with Francois and Etienne

Hands on experience in Athena X-IFU data analysis