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国台学术报告 NAOC COLLOQUIUM

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Time: Wednesday 2:30 PM, Dec. 30th **Location: A601 NAOC**

X-ray properties of medium and high-z clusters

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Dr Paolo Tozzi is staff member at the Osservatorio Astrofisico di Arcetri (INAF). He got his doctoral degree at II University of Rome in 1998. Then he joined the Space Telescope Science Institute as research assistant in the same year. He was Postdoc fellows at the department of physics and astronomy of the Johns Hopkins University from September 1998 to August 1999, working on X-ray emission from clusters on Galaxies, and on the Chandra Deep Field South Survey (PI R. Giacconi). He Started the activity as a permanent researcher at the Osservatorio Astronomico di Trieste in 1999, and has been "Primo Ricercatore" at INAF from 2009 till present.

Abstract

Distant clusters of galaxies are today a well known case for X-ray astronomy. Several clusters have been identified in the last few years up to $z \sim 2$, thanks to serendipitous X-ray deep observations, IR or SZ surveys, or a combination of these techniques. These findings potentially may have a very strong impact on many fields like cosmology, large scale structure of the Universe, evolution of the cluster galaxy population, and interactions between the IntraCluster Medium and the member AGNs. However, these studies are limited due to the very time-consuming follow-up needed to investigate high-z clusters. Here we report deep X-ray follow-up of some medium and high z clusters (in particular the Phoenix at $z \sim 0.6$, WARP1415 at $z \sim 1$, CXO1415 at $z \sim 1.5$ and XDGP0044 at $z = 1.58$) obtained with the Chandra and XMM satellites, to reach new insights on specific issues like the evolution of the cool core phenomenon, the chemical evolution of the ICM, and the growth of large scale structure of the Universe. These studies are also discussed in the perspective of a systematic, complete investigation of the high-z cluster population.

All are welcome! Tea, coffee, biscuits will be served at 2:15 PM.