

Galaxy Clusters : Chiara Ferrari 6h

I will review our current knowledge about the non-thermal component (relativistic particles and magnetic fields) of galaxy clusters, the largest gravitationally bound structures of the Universe. The cosmological and astrophysical implications of joint observational and theoretical studies of intracluster cosmic rays and magnetic fields will be detailed. I will also show the huge perspectives opened for this kind of studies by new-generation instruments observing in the different band of the electromagnetic spectrum (radio, hard X-rays and Gamma-rays).