Cosmological simulations of protoclusters





We are offering 6-months research position at the University of Bologna to study the assembly of baryonic matter into protoclusters through cosmological simulation

Requirements and preferred titles

The ideal candidates should have a master degree in astronomy or physics, and previous experience with hydrodynamical cosmological simulations. Previous research experience of about 3 years will also be a requirement. In particular, we are searching for a candiate with:

- Experience in the study of non-linear hydrodynamic phenomena, including the presence of turbulent motions and shocks in the the intracluster medium, in connection with its assembly history.
- Experience in the study of accretion history of galaxy clusters.

Research project:

The selected candidate will work at the realisation of high resolution cosmological simulations to study protoclusters at high redhsift. The main goal of the project is the characterisation of the mass and mass distribution in these structures.

The University of Bologna offers a diverse and rich research environment. The astronomy group is located in a campus together with two departments of the Italian institute for astrophysics - INAF - (IRA - radio astronomy institute and Astrophysical observatory).

For more information, contact annalisa.bonafede@unibo.it