



# - RAY ASTRONOMY 2019

*Current Challenges and New Frontiers in the Next Decade*

8-13 September 2019  
CNR/INAF Research Area, Bologna, Italy

Contribution ID: 308

Type: **Invited**

## Inter Galactic Medium at high spectral resolution

*Wednesday, 11 September 2019 09:00 (25 minutes)*

I will first review the baryon census in the local Universe and show that serious missing-mass problems are present at all scales. I will then present the possible solutions offered by hydro-dynamical simulations for the formation of structures, and show how theory reconciles these different-scale problems in the framework of a single missing-baryon problem. I will review the history of the hunt for the missing baryons over the past 20 years, and will present the most recent results both on the largest and smallest possible scales in the Universe. Finally, I will comment on the implications of these new results for future high resolution X-ray missions.

### Topic

Hot and diffuse baryons

### Affiliation

INAF - OAR

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**Session Classification:** HOT AND DIFFUSE BARYONS