

## Baryons in the Universe 2024



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# Virialization of the CGM and some of its implications

*Monday, 8 April 2024 14:25 (25 minutes)*

I will review basic results on the virialization of the CGM, a key phase transition determining when the gas is expected to be hot vs. cold. The presentation will highlight recent insights from modeling cooling flows in galaxy-scale halos and the concept of outside-in virialization, in which the inner CGM is the last part of a halo to sustain a hot phase. Time permitting, I will summarize results on the connections between CGM virialization and the properties of central galaxies, including star formation variability, galactic winds, and the formation of thin disks, as well as predictions for CGM observables.

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