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# Turbulence in the Circumgalactic Medium

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## Abstract

The circumgalactic medium (CGM) of nearby star-forming galaxies shows clear indications of O VI absorption, along with the presence of absorption lines from a host of lower ionization state species. This indicates that the CGM must be viewed as a dynamic, multi-phase medium. I will explore the possibility that key features of the CGM absorption lines may arise due to the presence of turbulence, and describe a series of chemodynamical simulations of turbulent media, which track ionizations, recombinations, and species-by-species radiative cooling for a wide range of elements. I will show that turbulence with a one-dimensional velocity dispersion of approximately 60 km/s replicates many of the observed features within the CGM, and I will describe discrepancies that point to effects that likely will need to be considered to capture the full range of observed features.

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