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O VII and O VIII in the CGM of simulated Milky Way mass galaxies

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Using the Eagle cosmological, hydrodynamical simulations, I have investigated the contents of the CGM for haloes of various masses, and the X-ray line absorption arising in these haloes. In ~10^{12} solar mass haloes, The CGM contains more mass than the stars or ISM, and typically somewhat more oxygen mass than the ISM. About half of the CGM gas is in the difficult to find $10^{5.5}$-10^{7} K range, and a large variety of ionization states are present. Many of the O VII and O VIII ions lie close to the virial radius. The O VII and O VIII ions trace the hot, volume-filling phase of the CGM, but are biased towards gas close to each ion's collisional ionization temperature, and to high-metallicity gas.