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Redshift-space streaming velocity effects on the baryon acoustic oscillation scale¹ JAHMOUR GIVANS, CHRISTOPHER HIRATA, Ohio State Univ - Columbus — Baryon acoustic oscillations (BAOs) have emerged as a leading probe of cosmic acceleration. If researchers wish to use the BAO scale as an accurate standard ruler, we must account for physical effects which can shift this scale. The streaming velocity effect is one such example first noted by Tseliakhovich & Hirata (2010). Later works examined streaming velocity-induced BAO shifts in real space (Blazek et al. 2016) and in redshift-space (Beutler et al. 2016). I present results of our redshift-space streaming velocity effect analysis on galaxies. I will then discuss our present work related to performing a similar analysis using the Lyman- α forest as a tracer of structure growth. The latest preliminary results and future expectations will be included.

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