

## ABSTRACT ONLY

### SATELLITE ACCRETION IN A $\Lambda$ CDM UNIVERSE

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This abstract summarizes our oral contribution to the conference. We use a dark matter only simulation to study the accretion of satellites in the  $\Lambda$ CDM model. The large volume and resolution of the simulation enabled us to identify  $\sim 350.000$  massive host haloes ( $M_{vir} \geq 5 \times 10^{12} M_{\odot}$ ) surrounded by  $\sim 700.000$  satellites. This sample allowed us to study the radial velocity profiles of all satellites as a function of their distance to the primary object. Furthermore, we analysed the dependence of the radial velocity distribution with respect to the mass of the host and its principal inertia axes, as well as the properties of the haloes that are being accreted, such as their mass, shape and angular momentum. We find an excess of inflowing and outflowing satellites in the radial velocity - distance phase-space, being the outflow excess higher in the high mass hosts subsample. Moreover, we show that the excess of infalling satellites is present at all distances for high mass hosts, even near the centre of the host halo.

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