

Universal properties of dark matter haloes: the halo mass function

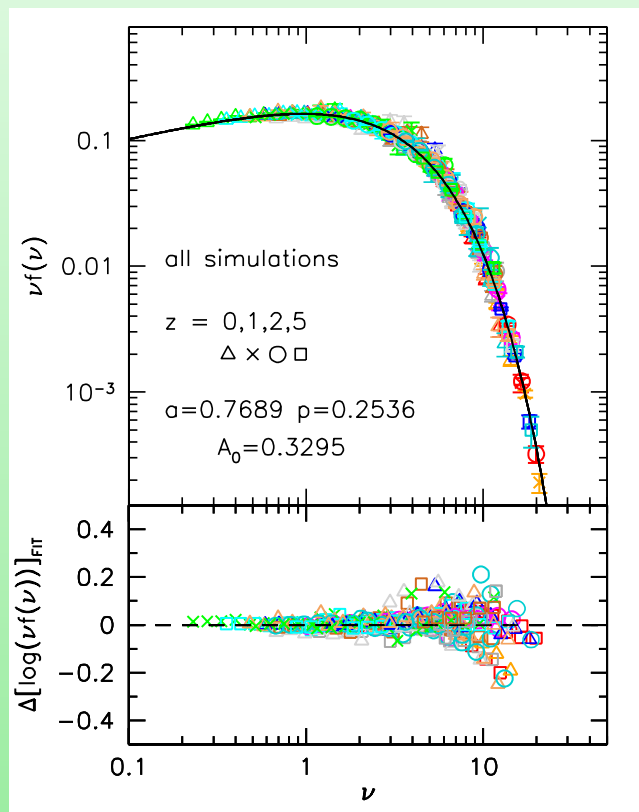
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(1) Virial haloes:

is the mass function universal as a function of redshift and cosmology?

$$f(M)dM = \nu f(\nu) = A_0 \left(1 + \frac{1}{(a\nu)^p} \right) \left(\frac{a\nu}{2} \right)^{1/2} \frac{e^{-a\nu/2}}{\sqrt{\pi}}$$



(2) Other overdensities $200\rho_b$, 200 , 500 , 1000 , $2000\rho_c(z)$:

does the halo identification affect universality?

is it possible to rescale the $z=0$ mass function to interpret their non-universality as a function of redshift?

