Cosmo sample 10⁻³ $E(z)^{-2/3}D_A^2Y_{500} = 10^A \left[\frac{M_{500}}{6 \times 10^{14}M_{\odot}}\right]^{\alpha}$ $A_{T=0} = -0.189 \pm 0.012$; $\alpha_{T=0} = 1.811 \pm 0.076$ $A_{T=T} = -0.148 \pm 0.011$; $\alpha_{T=T_c} = 1.863 \pm 0.072$ Theory Estimated (T = 0)Estimated $(T = T_c)$ $E(z)^{-2/3}D_A^2Y_{500}$ 10⁻⁵ 10^{15}

 $M_{500}~M_{\odot}$