Starburst-Driven Winds
SUB-GRID vs. RESOLVED MATTERS!

No feedback

Sub-grid winds

Resolved Feedback

SFR (M$_{\odot}$/yr) vs. Redshift

$z=30.0$
Outcome is sensitive to star formation history:

Same ICs, but different late time SFR:

- DM only
- Most stars form early
- More extended formation

J. Onorbe et al., in preparation
Cusp or core?

Overall in FIRE, cores form only in a limited range of halos masses: $\sim 10^{10-10^{11}} \text{Msun}$ (halos hosting galaxies with $M_* \sim 10^6-10^9 \text{Msun}$).

$\sim \text{MW mass halos are also affected: very little or no adiabatic contraction!}$

$z=0$

$z=1$

$\rho_{DM} \propto r^\alpha$

T.-K. Chan et al., in preparation