Most important statements of the paper "Cold uniform spherical collapse revisited"

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1.: minimal radius depending on number of particles N.

$$R_{min} \propto N^{-\frac{1}{3}}$$ (1)

2.: Fraction of particles with positive energy f^p can be approximated good through

$$f^p(N) \approx a + b \cdot log(N)$$ (2)

with $a = 0.048$ and $b = 0.022$, or

$$f^p(N) = 0.1 \cdot N^{0.1}$$ (3)

3.: kinetic energy per unit ejected mass $\frac{K^P}{f^p}$ (K^p is the sum over the kinetic energy of all emitted particles)

$$\frac{K^P}{f^p} \propto N^{\frac{1}{3}}$$ (4)

4.: Radial density profiles of the clusters in equilibrium $n(r)$ can be approximated by

$$n(r) = \frac{n_0}{1 + (\frac{r}{r_0})^4}$$ (5)

with $r_0 \propto N^{-\frac{1}{3}}$ and $n_0 \propto N^2$.