

New (upcoming) tools

- 3D optical depth (MODA) (A. Perego)
- Advanced Spectral Leakage (ASL) (A. Perego)
- SPH + ASL / IDSA (3D) (R. Cabezón)
- FLASH + IDSA (2D/3D) (K.-C. Pan)
- FISH + ASL (2D/3D) (R. Käppeli)
- ELEPHANT (3D) (M. Liebendörfer)
- fGR + M1 (2D/3D) (T. Kuroda)

- SPH 3D (SPHYNX code)
- 200,000 particles
- Integral Approach to Derivatives (IAD₀)
- *Sinc* kernel (n=5)
- Newtonian gravity
- LS220 EOS
- ν -transport by ASL
- 3 neutrino species ($\nu_e \bar{\nu}_e \nu_{\mu\tau}$)
- 20 energy bins (3 – 300 MeV)
- 1D optical depth
- 15 M_⊙ Heger et al. (2005)
- $\Omega = 0$





