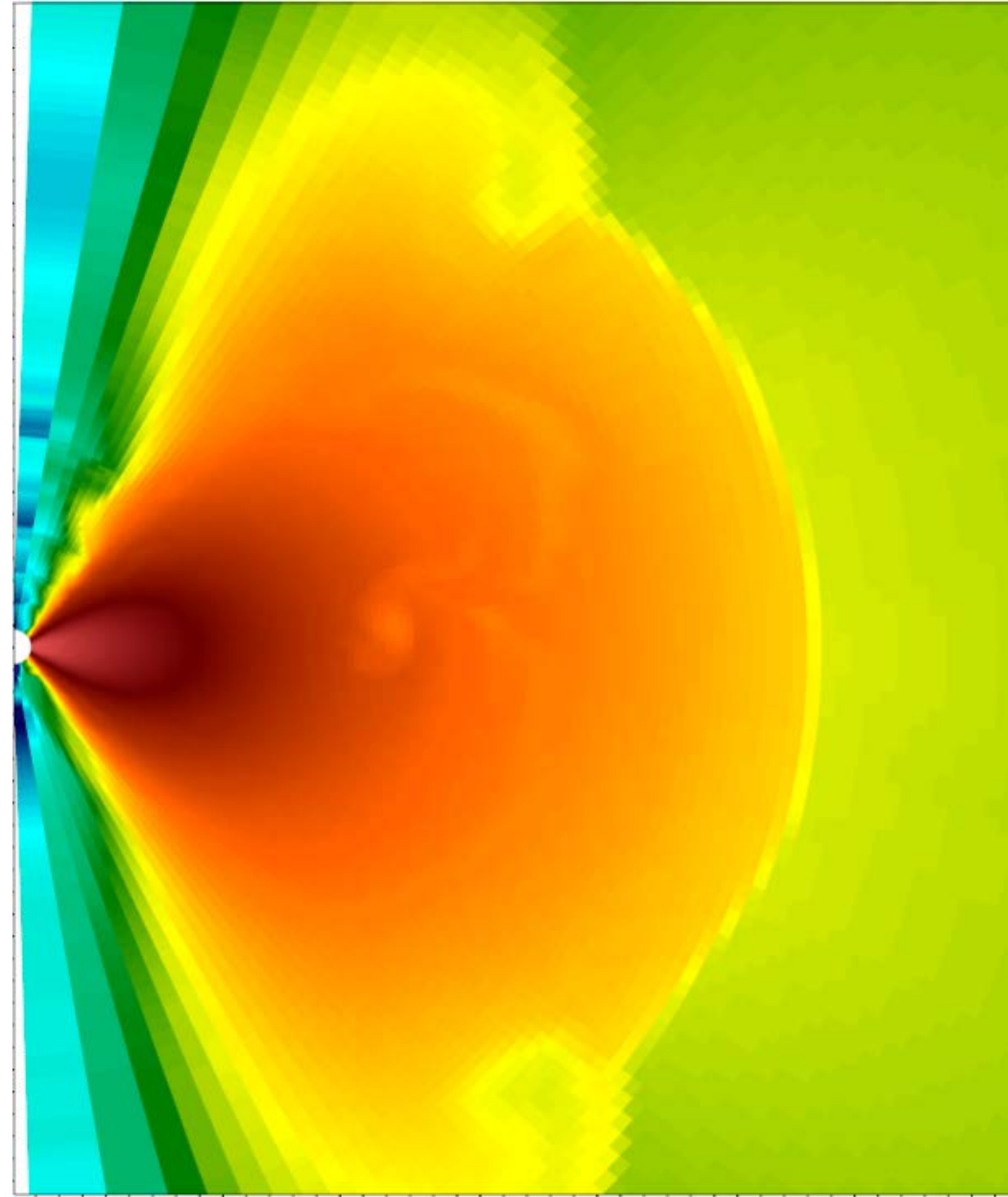
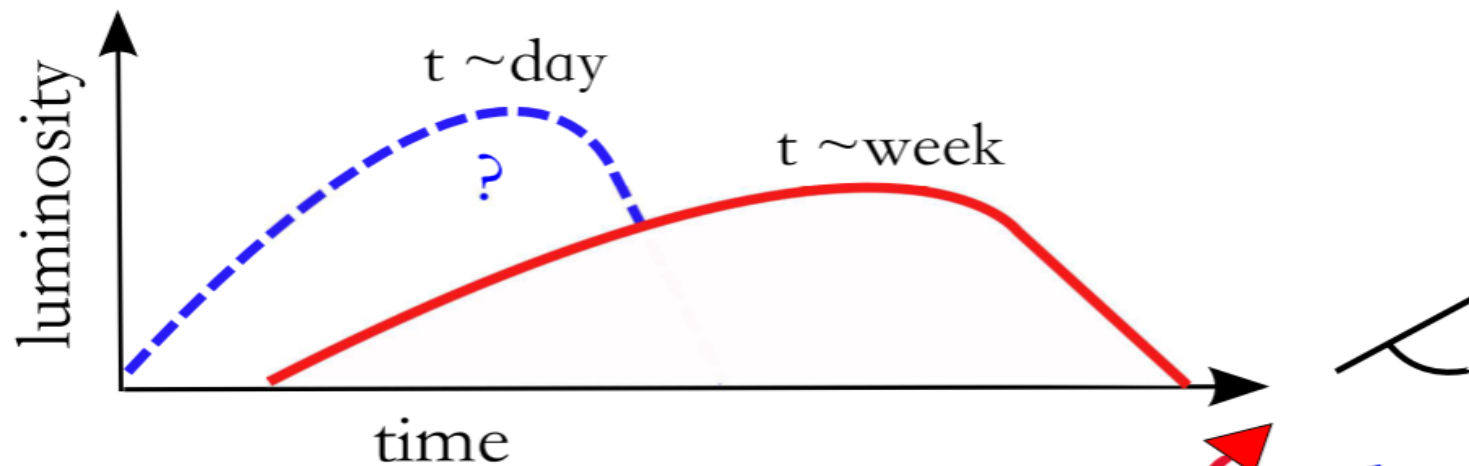


HMNS Outflows and the Blue Kilonova of GW170817



Electron fraction

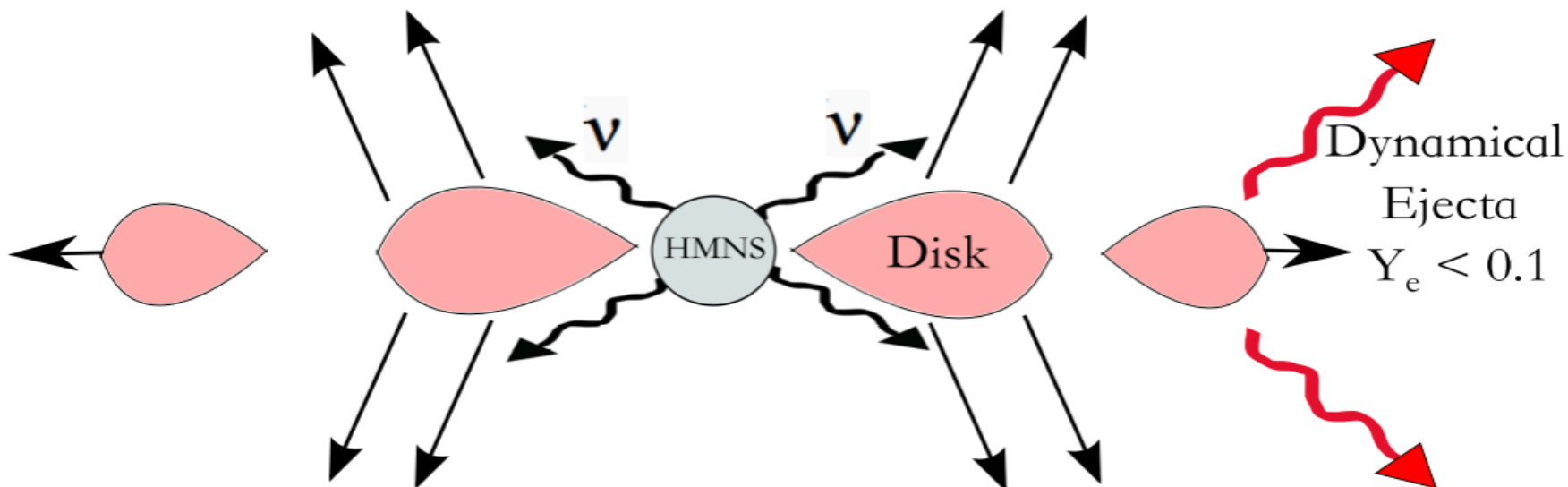


Opacity

Disk Outflow
 $Y_e \sim 0.2 - 0.4$



Color



Metzger & Fernández, 2014

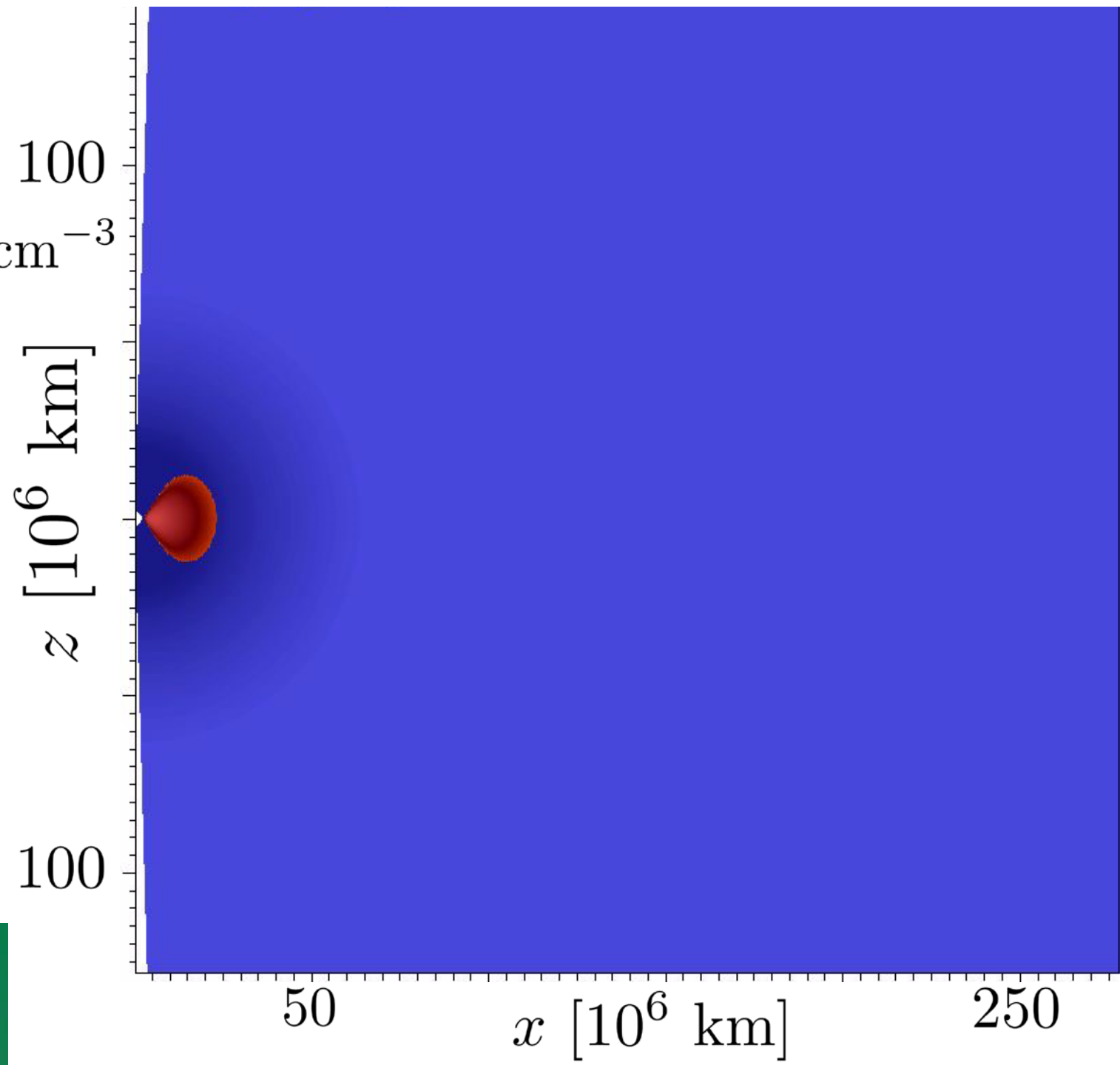
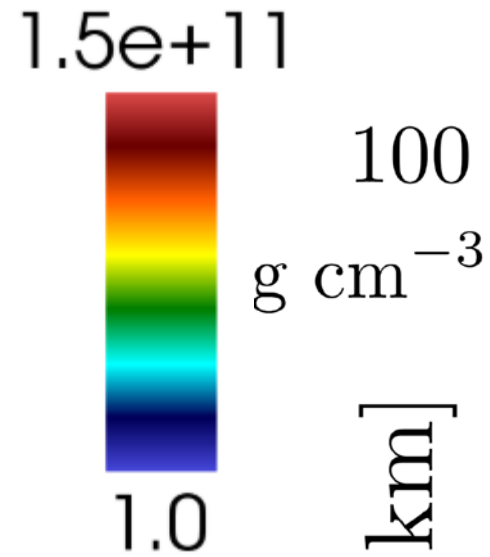
Disk evolution:

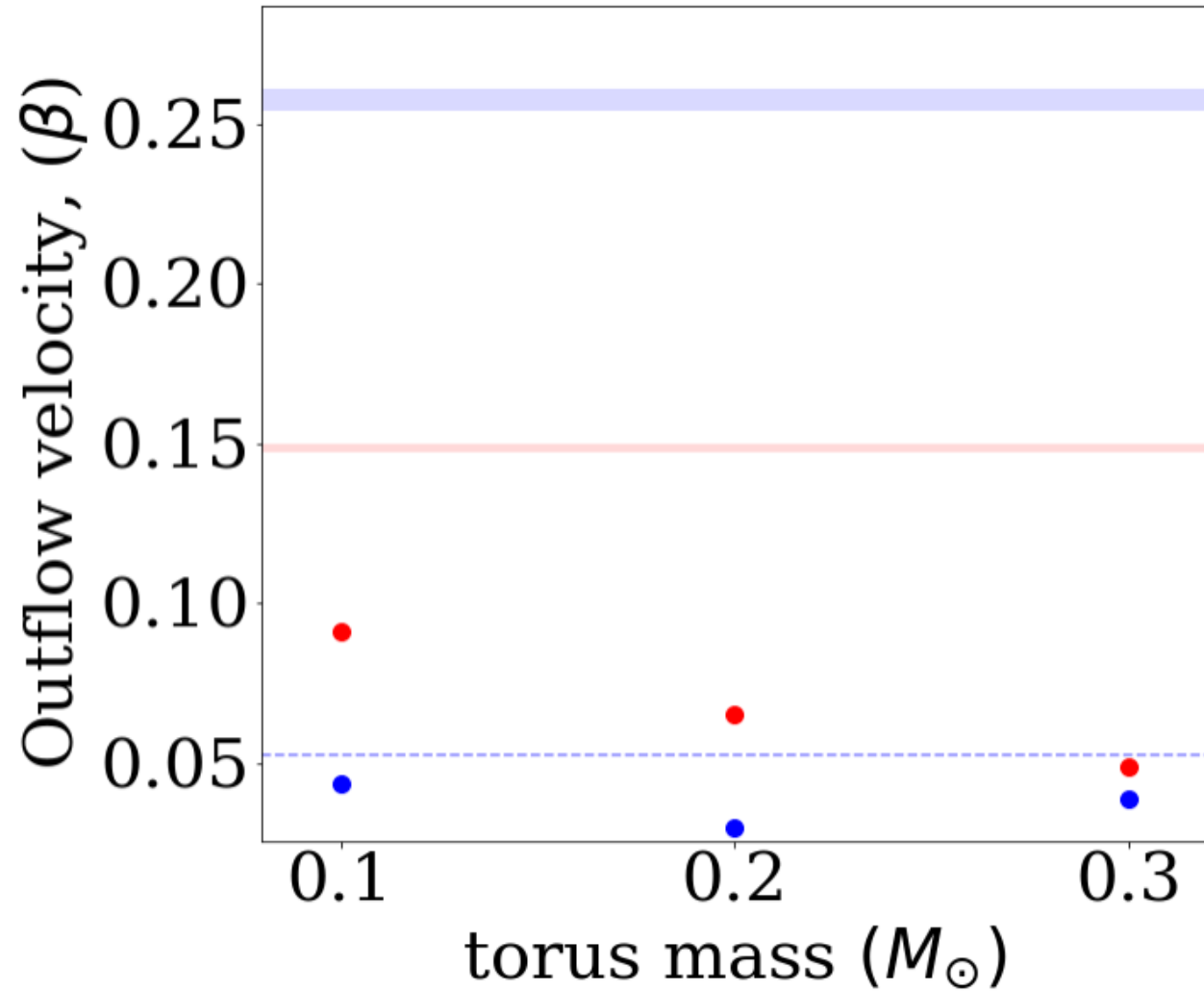
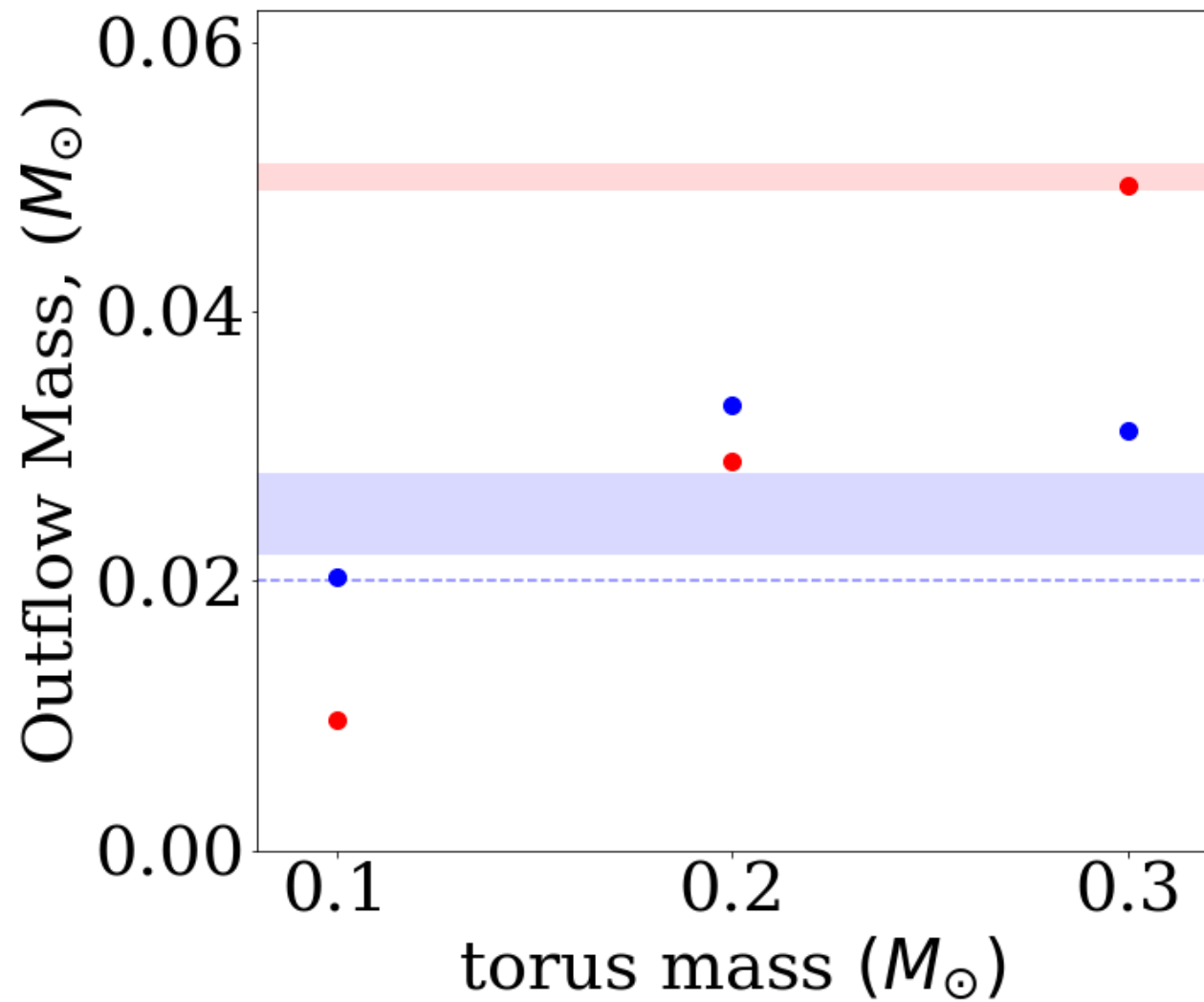
-Mass ejection?

-Neutrinos

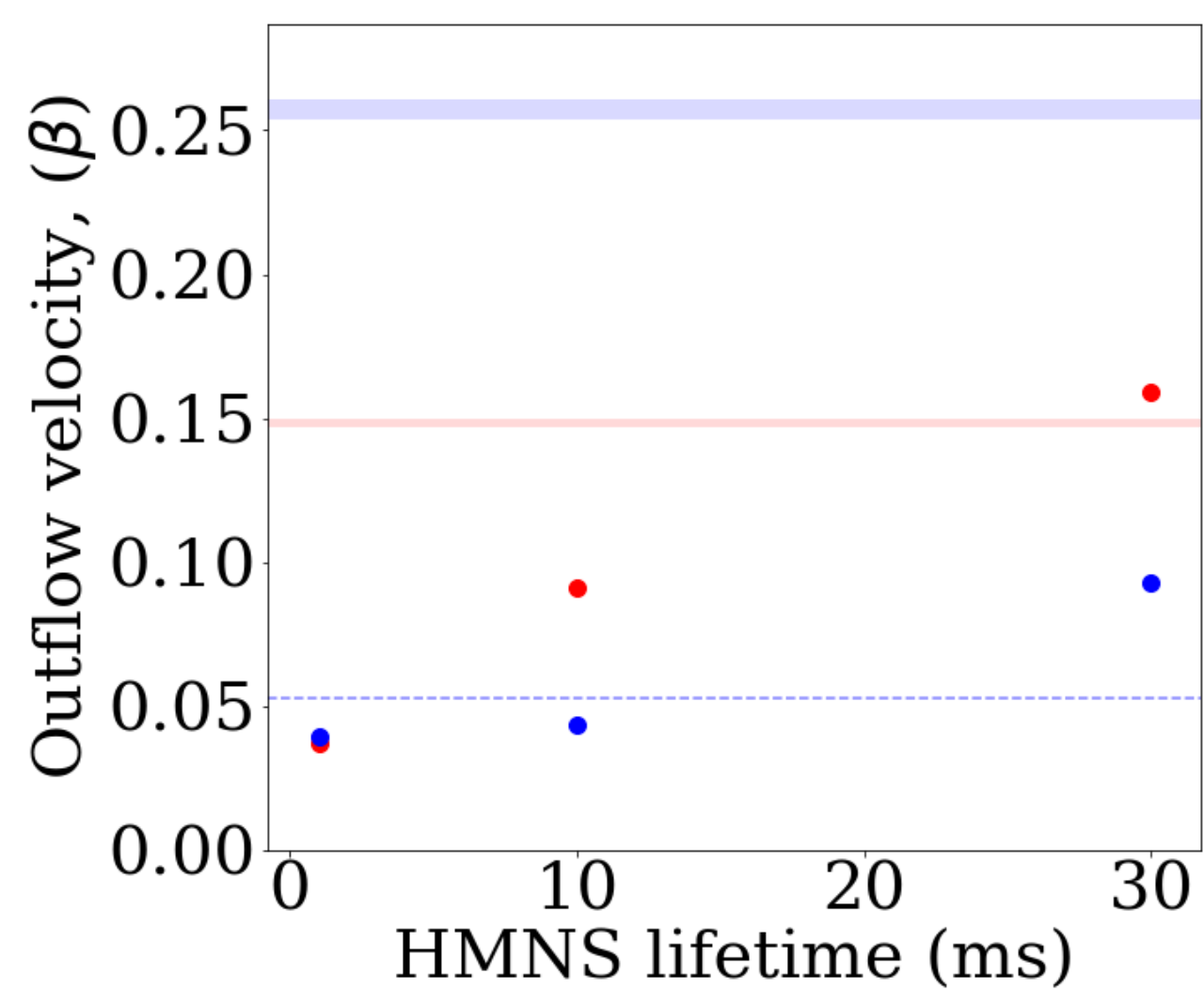
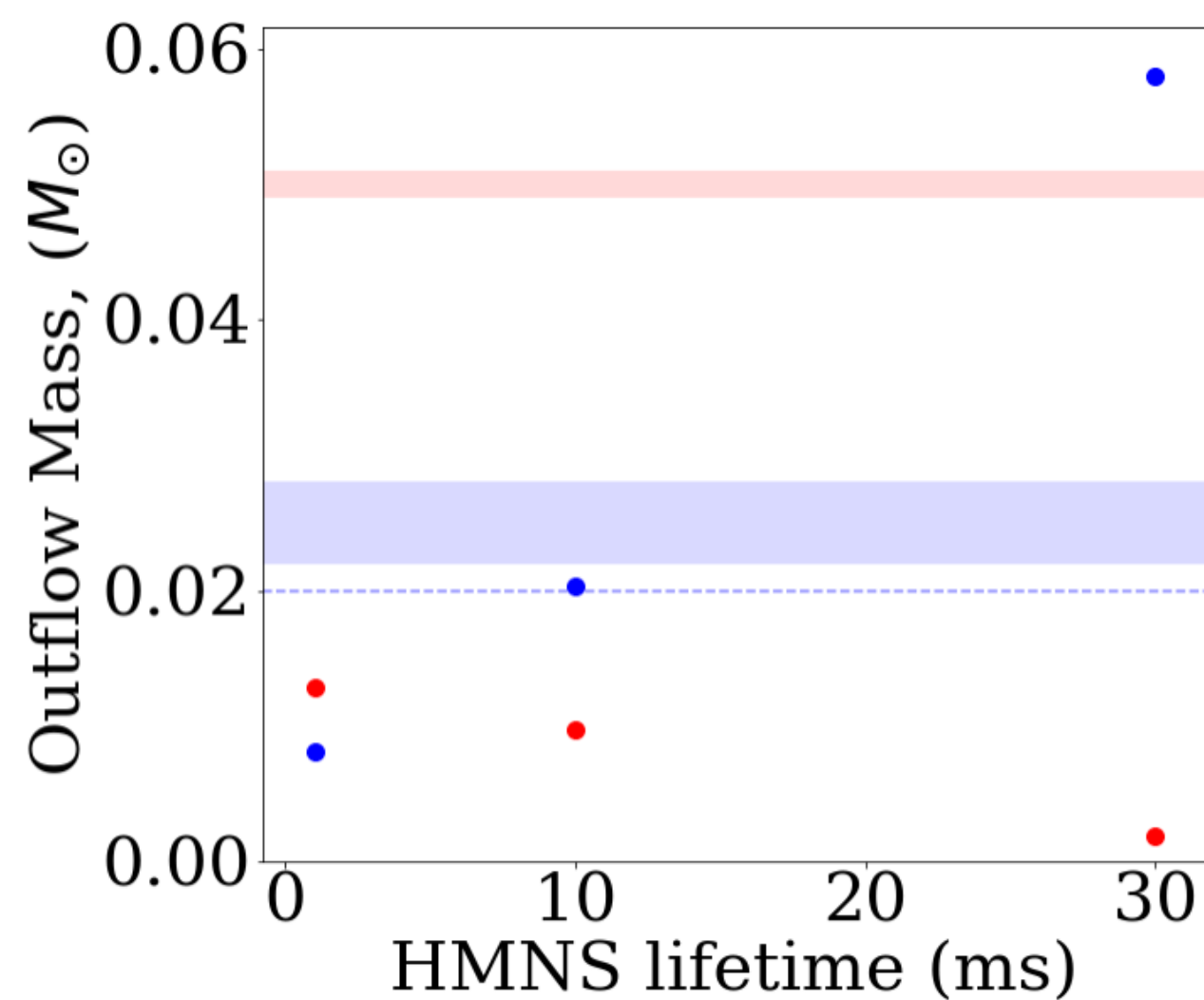
-Nuclear
Recombination

-Magnetic Fields

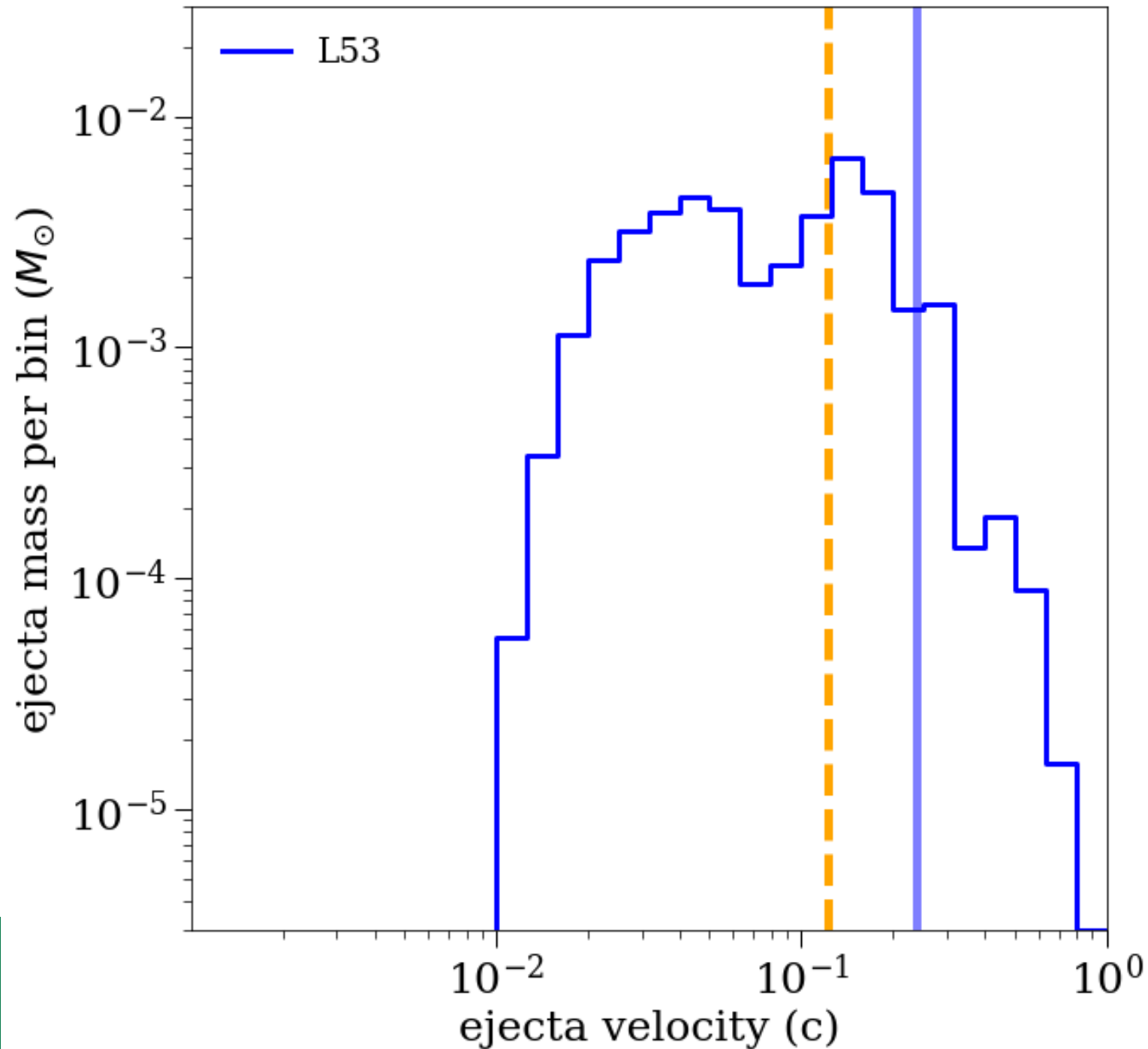




Low Velocities!



Also Low Velocities!



A question of ejecta mechanisms

Orange line:
Recombination

Blue Line:
Neutrino heating

Possible fixes

Magnetic fields (+3D)

Improved radiative transfer

Enhanced dynamical ejecta

