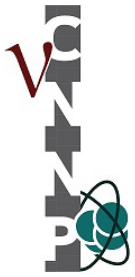

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Neutrinos from CCSN and the contribution of nuclear experiments

Monday, 24 February 2020 16:10 (30 minutes)

The impact of different microphysics inputs on the dynamics of core collapse
during infall and early post-bounce is studied performing spherically symmetric simulations in general relativity using a multigroup scheme for neutrino transport and full nuclear distributions in extended nuclear statistical equilibrium models.
We show that the individual EC rates are the most important source of uncertainty in the simulations, and establish a list of the most important nuclei to be studied in order to constrain the global rates.
The effect on the collapse dynamics and neutrino luminosity is studied.

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