

MARTINI Platform - r-process Nucleosynthesis (Readme)

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Tabulated yields refer to NSM systems with different Equation of State (EOS), Masses (M1 & M2), Grid Spacing and Neutrino Scheme, as reported in the following Table:

EOS	$M_1[M_\odot]$	$M_2[M_\odot]$	Grid Spacing mt	ν Scheme
DD2	1.0899	1.5570	246	M1
DD2	1.1968	1.4080	246	M1
DD2	1.2075	1.7250	246	M1
DD2	1.2980	1.2980	246	M1
DD2	1.3260	1.5600	246	M1
DD2	1.4350	1.4350	246	M1
SFHo	1.2980	1.2980	246	M1
SFHo	1.2980	1.2980	185	M1

We extrapolate the properties of the ejecta over timescales longer than the simulated ones (Eq. 1). The additional wind ejecta mass is estimated as a varying fraction of the disc mass:

$$m_{wind}^n = m_{wind, \text{ sim}} + n10 \left(m_{disc} - m_{disc}^{bern} \right) \quad n \in \{0, 1, 2, 3, 4\}, \quad (1)$$

Yields are provided at t=1 day and t= 1 Gyr.

References

<https://arxiv.org/abs/2610.37893>