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# The mass-loss history of the Sagittarius dwarf galaxy

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Despite its discovery almost 30 years ago and its subsequent mapping of its core and tidal tails, the progenitor mass of Sagittarius is still highly uncertain/debated, spanning almost two orders of magnitudes!

On the one hand, recent observations of the chemo-dynamical structure of Sgr's stellar stream and structure of the outer disc favour a massive progenitor with $> 6 \times 10^{10}\,\mathrm{M}_{\odot}$, while detailed stream fitting of the put the current mass of Sgr at a few times $10^{8}\mathrm{M}_{\odot}$ on the brink of total destruction. How can these different lines of evidence be reconciled? This poses an interesting problem for studying the mass loss of Sagittarius for which I will present recent results from live N-body models of Sagittarius and its interaction with the Milky Way and what they can tell us about its dark matter profile.

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