Recovery of streams in a simulated stellar halo

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What Looking for method to recover streams in the Milky Way.

WHY If the MW was built hierarchically, there should be many streams in the halo.

With the recently launched Gaia we should be able to find these.

HOW We have optimised the ROCKSTAR <u>halo</u> phase-space finder (Behroozi et al 2013)

as a stream finder. We have applied this algorithm on a simulated stellar halo.

WHAT WE GET With suitable choices of the characteristic ROCKSTAR parameters, we have recovered well 74 of 150 streams present.

- —The streams found are mostly pure (associated to a single progenitor)
- —The recovery fractions are typically 40%.

