

HYPERRUNAWAY HOT SUBDWARFS FROM SUPERNOVAE TYPE IA

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Hot subdwarf stars of spectral type O and B are the products of binary star evolution. One of the most extreme outcomes are hyperrunaway hot subdwarfs, which were ejected by the supernova explosion of a former white dwarf companion. The resulting ejection velocity can be fast enough to escape the galactic potential. However, US 708 is, so far, the only known object most likely originating from this scenario. Using the most recent Gaia data and theoretical predictions, we are searching for more of these objects. These stars can then be used to reconstruct the masses of the exploded white dwarfs where it is still under debate at which mass a white dwarf is able to explode. In my talk, I will provide a brief outline of the ejection mechanism, our target selection and a few preliminary results.