



HIGHLIGHTS: this week in A&A

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In section 5. Galactic structure, stellar clusters and populations

"Lucky Imaging of M subdwarfs", N. Lodieu, M. R. Zapatero Osorio, E. L. Martin, [A&A 499, p. 729](#)

The fraction of multiple stars, as a function of major stellar mass and of the initial conditions of stellar formation, is a major constraint on star formation theories. This paper presents significant, new results on the binary fraction of very-low-mass stars of the Galactic halo. The authors' new high-resolution imaging has identified a new "extreme M subdwarf" binary system and confirmed or rejected other authors' candidate pairs. The most significant result is that the derived binary fraction (3%) of M subdwarfs proves that the halo binary fraction for VLM stars is substantially different than in Galactic disk, solar-metallicity M dwarfs. This is an important data point for future theoretical work.

