

The Disk Mass Project; breaking the disk-halo degeneracy

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The density profiles of dark matter haloes, as inferred from rotation curve decompositions, depend critically on the adopted M/L of the disk component. The maximum-disk hypothesis is an often used refuge to circumvent this disk-halo degeneracy. However, a direct and absolute measurement of the M/L can be derived from the vertical component of the stellar velocity dispersion ellipsoid. In this talk, we will present our ongoing Disk Mass project in which we use a novel technique to measure the stellar velocity dispersion in a statistically significant sample of nearly face-on spiral galaxies. For this purpose, we have designed and build two wide-field special-purpose Integral Field Units for the WIYN and Calar Alto telescopes. We will describe these IFUs and present some first results.

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