## Mass motions in type II spicules

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**Abstract.** Recently, a second type of spicules was discovered at the solar limb with the Solar Optical Telescope onboard Hinode. These previously unrecognized type II spicules are thin chromospheric jets that are shorter lived (10-60 s) and that show much higher apparent upward velocities (of order 50-100 km s-1) than the classical spicules. Here, we report on observations of these type II spicules using spectra in the Ca II H-line taken at the Swedish Solar Telescope on La Palma. We find Dopplershifts often reaching 50 km s<sup>-1</sup> in limb spectra, sometimes reaching more than 100 km s<sup>-1</sup>. These large Dopplershifts in limb spectra are consistent with the large apparent velocities seen in type II spicules with Hinode being actual mass motions.