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How to model multi-scale magnetic fields of late-type active stars?

Magnetic fields of late-type stars are always much stronger when measured using Zeeman broadening compared to polarimetry. This indicates that magnetic energy is concentrated predominantly in small-scale structures, which contribute no signal to polarimetric observables. However, for the most active late-type stars, such as fast-rotating M dwarfs, the small-scale field is so strong that it starts to affect the broadening of polarisation profiles. This necessitates simultaneous treatment of small- and large-scale fields in the forward polarised radiative transfer calculations. In this talk I will discuss alternative methodologies of such modelling and present results of application of some of these approaches to active M dwarfs.