Session 4

(Invited) An Overview of Disambiguation Techniques

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Typical Stokes inversion codes can only infer the transverse component of the magnetic field up to an ambiguity of 180 degrees in its direction. To take full advantage of the information returned by the inversion, it is necessary to resolve this ambiguity. I will give an overview of existing disambiguation methods, focusing on some recent approaches that incorporate either the temporal evolution of the magnetic field, or its variation with optical depth to provide an additional constraint on the direction of the field, as well as the use of machine learning to directly infer the disambiguated components of the magnetic field from Stokes spectra.