

Development of SoWiSP, a wide spectral coverage spectropolarimeter

M. Galloway, D. Paillon, and L. Kleint

Astronomical Institute, University of Bern, Sidlerstrasse 5, Bern CH-3012, Switzerland

contact e-mail: *michelle.galloway@unibe.ch*

The Solar and stellar Wide Spectral coverage Polarimeter, SoWiSP, is a dedicated instrument for investigating time-dependent energetics of solar flares. With four-state polarisation measurements and a field-of-view the size of an average sunspot, the instrument, currently in the development phase, will allow to probe changes in the solar magnetic structure with a target spatial resolution of 5 arcseconds. The latter is achieved with the use of an integral field unit, which allows for simultaneous spectral acquisition for a spatially multiplexed 60 x 60 arcsecond field-of-view. Unique among spectropolarimeters is its large spectral range in the visible regime, which includes the Balmer continua from 350 nm up to the chromospheric Ca II 854.2 nm line, with a spectral resolving power of 30k at 600 nm. This presentation will describe the science goals, instrument requirements and status of SoWiSP, with emphasis on its unique capabilities for investigating the underlying mechanisms behind solar flares.