SoWiSP: An Echelle spectropolarimeter for flare observations

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The Solar and stellar Wide Spectral coverage Polarimeter (SoWiSP) is a ground-based spectropolarimeter, tailored for observing solar and stellar flares. It is currently under development by the Space Weather group at the University of Bern.
SoWiSP is being developed in two versions: a solar and a stellar instrument, the former additionally including an integral-field unit. Its design features an Echelle spectrograph with a double-beam setup, targeting a polarization sensitivity of 10^{-3}. I have conducted spectroscopy simulations for Echelle instruments with Python while the global optical design has been performed with Code V.
The nighttime instrument will be installed and commissioned at the Swiss Optical Ground Station (OGS) in Zimmerwald, with privileged access to a 80 cm Ritchey-Chrétien telescope, for long-term monitoring of flaring M-dwarfs. We aim to obtain first light in 2025.

I will present the current status and future developments of the stellar version of SoWiSP, with a focus on its optical capabilities as well as the planned observation strategy at the Swiss OGS.