



1er cru: A spectropolarimeter to measure the polarisation of auroral thermospheric emission spectra

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The polarisation of auroral thermospheric red line have been detected few years ago with degree of polarisation around 2% (Lilensten et al. 2008). Since then several measurements campaign and simulation have been performed (Barthelemy et al. 2011, Lilensten et al. 2013). However, the polarisation of other lines have never been explored. We built a spectropolarimeter able to cover the auroral spectrum from 400 nm to 700 nm with spectral resolution down to 0.5 nm. The first light of the instrument have been performed in December 2014 in Skibotn (Norway). Despite some misalignments problem, we have been able to get some spectra on both ordinary and extraordinary channels. The data are underprocessing but we are confident to be able to extract the polarisation of some other lines. We will especially check that the green line is unpolarized as explained in Bommier et al. (2011).