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### Polarization patterns in the sky

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Polarimetry is a powerful technique that reveals details of astronomical objects that otherwise would be concealed in standard imaging or spectroscopic observations.

However, reliable measurement of the polarization requires a good understanding of all contamination sources in our system. As the main source of light in our nocturnal sky, the Moon and its patterns of polarization in the sky are our focus in this study. We performed multi-wavelength observations with the FORS2 instrument at the VLT on blank fields during the full Moon to analyze these patterns and their influences on polarimetric measurements.

We present and discuss our results of the moonlight polarization patterns, comparing them to known analytical models of single and multiple scattering and our proposed corrections.

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