

52nd IAA SYMPOSIUM ON THE SEARCH FOR EXTRATERRESTRIAL INTELLIGENCE (SETI) –  
The Next Steps (A4)  
SETI 1: SETI Science and Technology (1)

A SEARCH FOR OPTICAL LASER EMISSION FROM BARNARD'S STAR AND SIRIUS

**Abstract**

A laser light emission from Barnard's star and Sirius is searched in high-resolution optical spectra obtained between 2020 and 2021 using the Very Large Telescope UT2, with the UVES spectrometer, at the European Southern Observatory (ESO). Absorption and emission spectral lines must be avoided and a detection threshold is qualitatively set. In addition, the line width must fall between the instrument profile and the width of the smoothing width used to compute a median-smoothed spectrum.