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Seminar über Microwave Physics and Atmospheric Physics

Referent/in: Alexandra Brönnimann, IAP, University of Bern

Titel: FFT Correlator for TEMPERA-C

The new TEMPERA-C is the successor of the Temperature Radiometer (TEMPERA). It is designed to resolve the polarization of the oxygen emission lines and thus raise the altitude limit of temperature retrievals to the lower mesosphere. TEMPERA-C will be using the "Universal Software Radio Peripheral" USRP-2955 to calculate the digital FFT and cross-correlation of the signal in two orthogonal linear polarizations. For my bachelor thesis, I performed a variety of functional tests on this backend. I will present several results regarding the filter function, radiometric noise, channel response, and crosstalk.

Zeit: Freitag, 4. Juni 2021, 10:15 Uhr

Ort: Zoom Link: <https://unibe-ch.zoom.us/j/97081325603>
Meeting ID: 970 8132 5603
Passcode: iapmw