



## **Minor constituents of the Venus atmosphere measured by SPICAV/SOIR on board Venus Express**

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The SOIR instrument which combines an echelle spectrometer and an AOTF (Acousto-Optical Tunable Filter) for the order selection performs solar occultation measurements in the IR region (2.2 - 4.3  $\mu\text{m}$ ) at a resolution of  $0.12 \text{ cm}^{-1}$ , the highest on board Venus Express. A description of the instrument and its measured performances will be presented.

The wavelength range probed by SOIR allows a detailed chemical inventory of the Venus atmosphere above the cloud layer (65 to 150 km) with an emphasis on vertical distribution of the gases. In particular, measurements of HDO, H<sub>2</sub>O, HCl, HF, CO and CO<sub>2</sub> vertical profiles have been routinely performed. Temperature retrievals are also tentatively described.