PHEBUS : A EUV-FUV spectrometer for the BepiColombo MPO mission

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PHEBUS is a dual FUV-EUV spectrometer working in the wavelength range from 30 to 330 nm and devoted to the characterisation of Mercury’s exosphere composition and dynamics. Two gratings and two detectors are used according to a special, innovative, compact design. A one degree-of-freedom scanning system allows probing, at the highest possible signal to noise ratio, selected regions and altitude ranges of interest. Surface ice layers, in permanently shadowed regions of high-latitude craters, will also be searched for through H Ly-alpha reflectance measurements.