Experimental Spectroscopy

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This lecture focuses on the spectroscopic diagnostics of plasmas in the soft x-ray region, which covers the spectral range from about 30 nm down to about 0.15 nm.
We start with considerations on the setup of proper spectroscopic systems and discuss the properties and characteristics of their components. Possible mistakes known from the literature will be pointed out.
For the analysis of observed spectra kinetic models are used and will be discussed. Examples of diagnostics techniques conclude the lecture.