

## OPTICAL EMISSION LINES AND THE X-RAY PROPERTIES OF TYPE 1 SEYFERT GALAXIES

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The spectrum of Type 1 Seyfert galaxies is characterized by prominent broad emission lines and by the presence of a strong continuum of ionizing radiation. In the framework of the accreting black hole model, which provides the most viable interpretation of nuclear activity in galaxies, the broad emission line profiles and intensities carry fundamental information concerning the dynamics of the line emitting plasma and its ionization properties. In view of the extremely compact nature of the Broad Emission Line Region (BELR) and of the ionizing radiation source, a thorough analysis of the spectra originated by these components represents the key to investigate the physics behind Active Galactic Nuclei (AGN). In this contribution we report on the study of the optical emission lines and X-ray spectra of a sample of Type 1 AGN, collected at the *Sloan Digital Sky Survey* database and observed by the *XMM-Newton* satellite. Exploiting the different instruments carried onboard *XMM*, we identify the spectral components of the soft and hard energy bands (in the range from 0.3 keV up to 10 keV). The properties of the X-ray continuum and of the Fe K $\alpha$  line feature are investigated in relation to the optical broad emission line profiles and intensity ratios. The resulting picture of emission, absorption and reflection processes is interpreted by means of a BELR structural model that was developed on the basis of independent optical and radio observations.