

THE UV AND OPTICAL Fe II SEMI-EMPIRICAL MODELS AND THEIR APPLICATION FOR AGN TYPE 1 SPECTRA

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Here we presented our optical Fe II (4000-5500 Å) and the improved UV Fe II semi-empirical model in 2600-3200 Å range and discussed their application for AGN type 1 spectra. We compared our Fe II semi-empirical models with other empirical and theoretical UV and optical Fe II templates from literature, and analysed their differences. We tested how application of different Fe II templates affects to $H\beta$ + optical Fe II and Mg II + UV Fe II decomposition, and consequently to obtained pure $H\beta$ and Mg II shapes, after Fe II removing. We found that differences are small in the case of obtained $H\beta$ profiles, while in the case of the Mg II line, they are larger, since the differences between considered UV Fe II templates are more significant.