METAL LINE BLANKETED NON-LTE MODEL ATMOSPHERES FOR CENTRAL STARS OF PLANETARY NEBULAE

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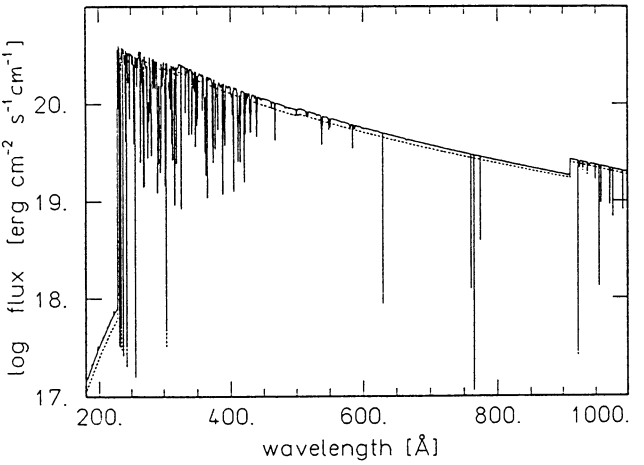
Absorption lines of highly ionized iron group elements dominate the UV spectra of many hot stars. They were identified in several central stars as well as in sdO stars, in PG 1159 stars and in the hottest DO and DA white dwarfs. Due to the high effective temperatures atmospheric modelling including metal line blanketing has to be done under NLTE conditions. Adequate models have become available only very recently (Dreizler & Werner 1992). We present new NLTE model atmospheres blanketed by some 120 000 lines from iron group elements (Sc through Ni). We adopted Anderson's (1991) statistical approach along with an opacity sampling technique using our Accelerated Lambda Iteration (ALI) code. We generally found:

- Many strong metal lines cause substantial blocking at the flux maximum.
- The temperature in the continuum forming layers is increased by backwarming due to iron group lines; outer layers, cooled by CNO lines, are unaffected.
- The line profiles of H and He become deeper and broader, indicating that the neglect of NLTE metal line blanketing could cause the discrepancies encountered when fitting He II and H I lines in hot subdwarfs.

Anderson, L.S. 1991, NATO ASI series C, 341, 29
Dreizler, S., Werner, K. 1992, Lecture Notes in Physics, Springer, 401, 436



EUV model flux with (solid)/without metal line blanketing. $T_{\rm eff}$=80kK, log g =7.5, abundances H/He/C/N/O/iron group= 1/98/0.3/0.3/0.1/0.1 by number

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