

**THE INVERSE BREMSSTRAHLUNG IN ASTROPHYSICAL
PLASMAS: THE ABSORPTION COEFFICIENTS
AND GAUNT FACTORS**

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The electron-ion inverse Bremsstrahlung is considered here as a factor of the influence on the opacity of the different stellar atmospheres and other astrophysical plasmas. It is shown that this process can be successfully described in the frames of cut-off Coulomb potential model within the regions of the electron densities and temperatures. The relevant quantum mechanical method of the calculation of the corresponding spectral coefficient processes is described and discussed. The results obtained for the plasmas with the electron densities from 10^{14}cm^{-3} to 10^{20}cm^{-3} and temperatures from $5 \cdot 10^3\text{K}$ to $3 \cdot 10^4\text{K}$ in the wavelength region $200\text{nm} < \lambda < 500\text{nm}$ are presented. Also, these results can be of interest for different laboratory plasmas.