

Short talk

**THE EXTERNAL MAGNETIC FIELD INFLUENCE ON THE
HYDROGEN BALMER LINES PROFILES
IN ELECTRIC DISCHARGES**

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A survey is given of the results obtained in a study of external magnetic field influence on the shapes of spectral lines from hydrogen Balmer series in abnormal glow discharges under various experimental conditions.

Short talk

**THE APPLICATION OF THE CUT-OFF COULOMB POTENTIAL
FOR THE CALCULATION OF A CONTINUOUS SPECTRA
OF DENSE HYDROGEN PLASMA**

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The continuous optical spectrum of dense hydrogen plasma is modeled with the complete quantum mechanical model based on the cut-off Coulomb potential. Here are presented the results of calculation of a continuous optical spectra of dense hydrogen plasma compared with the experimental results obtained in "Laboratory for dense plasma" at the Pierre et Marie Curie University in Paris. The cut-off Coulomb potential gives the opportunity to model the most significant effects in dense plasma. The additional effects, including some of time dependent, which influences the spectral characteristics, could be easily added. This work is a continuation of previous works on conductivity of dense plasma based on cut-off Coulomb potential.