Poster paper

A SIMPLE MONTE-CARLO SIMULATION OF EXCESSIVE DOPPLER BROADENING OF THE $\mbox{H}\alpha$ LINE

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Excessive Doppler broadening of Hydrogen lines has been recorded in various types of discharges during the last two decades. It is also common in plasma fusion experiments. This paper deals with an explanation for origin of this effect using the collision model (CM). For this purpose a computer code is developed using the Monte-Carlo technique for fast neutrals. Preliminary results are compared with earlier experimentally obtained profiles in an abnormal glow discharge.