

Abstract Submitted
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Simulation of non LTE opacity with incoming radiation¹ MARCEL KLAPISCH, MICHEL BUSQUET², ARTEP, inc., Ellicott City MD 21042 — Simulation of radiative properties of hot plasmas is important for ICF, other laboratory plasmas, and astrophysics. When mid-Z or high-Z elements are involved, the spectra are so complex that one commonly uses LTE approximation. This was recently done in interpreting a carefully calibrated experiment on Fe at 160 eV [1]. However some disagreement remains concerning the ion charge distribution. The newest version of HULLAC [2] has the capability to take into account an incoming radiation field in solving the rate equations of the coronal radiative model (CRM). We will show results with different representation of the radiation field.

[1] J.E. Bailey, G.A. Rochau, C.A. Iglesias, et al., Phys. Rev. Lett. 99, (2007) 265002-4.

[2] M. Klapisch and M. Busquet, High Ener. Dens. Phys. 5, (2009) 105-9.

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