

Abstract Submitted
for the DPP10 Meeting of
The American Physical Society

Influence of external radiation on non-LTE opacities of Xe¹ MARCEL KLAPISCH, MICHEL BUSQUET², ARTEP, Inc., Ellicott City, MD 21042 — In Laboratory Astrophysics, where astrophysics phenomena are scaled down to the laboratory, Xenon is commonly used. In most cases, astrophysical plasmas are not dense enough to warrant LTE. However, they are surrounded by radiation fields. Extensive detailed level computations of non-LTE Xe around $T_e = 100\text{eV}$ were performed with HULLAC [1], with different radiation temperatures and/or dilution factors. Generally, the effects are very important, even with small dilution factors.

[1] M. Klapisch and M. Busquet, High Ener. Dens. Phys.**5**, (2009) 105-9; Bull. Am. Phys. Soc.**54**, (2009) 210.

¹This work was supported by a subcontract with the Center for Radiative Shocks Hydrodynamics at the University of Michigan, Ann Arbor.

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Date submitted: 14 Jul 2010

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