Improved non-LTE simulation algorithm[1] MICHEL BUSQUET[2],
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— The RAdiation Dependent Ionization Model (RADIOM)- a.k.a Busquet's model-
[1] has proven its success in simulating non –LTE effects in laser fusion plasmas [2].
This improved algorithm can take into account Auger effect by a new parameter
fitted to SCROLL [3] results. It is independent of the photon binning thanks to a
projection on a standard grid. It guarantees smoother convergence to LTE. This
algorithm has been implemented in a new way in the hydro-code FASTnD. Hydro
simulations on the recent subMJ targets[4], with and without non-LTE corrections
will be shown. [1] M. Busquet, Phys. Fluids B 5, 4191(1993). [2] D.G. Colombant
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