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On the transient spatial localization model

Significant discrepancies relevant to helioseismology between experimental and theoretical photon absorption by plasmas remain unresolved. Interestingly, a new process called transient spatial localization (TSL), where the plasma perturbs the final states in photon ionization processes, ostensibly enhances cross-sections resolving the extant discrepancies. The TSL model, however, is shown to involve *ad hoc* formulas not derived from fundamental principles and systematic approximations. In addition, a variant of the TSL model, which claimed to enhance electron collisional ionization, is inconsistent with the Schrodinger equation and fails to reproduce known results.

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