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Photoionization of negative hydrogen ion beam

Thursday, 3 October 2024 09:00 (30 minutes)

Model and computation of photoionization of negative hydrogen ion by using strong laser is considered. The method of H- photoionization is interesting for laser assisted charge exchange injection project. In this paper we develop calculation of high efficiency photoionization through time dependent wave equation with application of powerful lasers that has nonlinear effects compared to conventional linear crossection method of calculation. Other mechanisms of photoionization like excitation of hydrogen ion resonances are also considered.

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