

# Theory of ionization processes in positron-atom collisions

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We review past and recent theoretical developments in the description of ionization processes in positron-atom collisions. Starting from an analysis that incorporates all the interactions in the final state on an equal footing and keeps an exact account of the few-body kinematics, we perform a critical comparison of different approximations, and how they affect the evaluation of the ionization cross section. Finally, we describe the appearance of fingerprints of capture to the continuum, saddle-point and other kinematical mechanisms.