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Abstract for an Invited Paper
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General methods for computing atomic collision processes

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The general problem of electron-atom collisions within the framework of the non relativistic Schroedinger equation will be the subject of the presentation. The convergent close-coupling approach (CCC) will be discussed for a variety of targets and comparisons with experiment given. For the fundamental electron-hydrogen system, recent progress in computational methods including the CCC, exterior complex scaling (and variants), R-matrix method with pseudostates and time-dependent approaches will be reviewed. It will be demonstrated that this fundamental problem is now computationally solved for practically all scattering processes of experimental interest within the non-relativistic regime.