

Although the collisions of electrons and atomic hydrogen has been studied for several decades, there is still neither a complete database of scattering data, nor a universal method that would let generate such data. For astronomical and other purposes the cross sections of electron-hydrogen collisions are necessary, in a broad range of energies – from tenths of electronvolt to millions of electronvolts. In this work the author concentrates on several established approaches to electron-atom scattering and confronts results of his own implementations of these methods against the published data and results of freely available computer codes. A special attention is given to the overlaps of different methods, so that in the end a database with easy user interface can be offered for common practical usage of scattering data in applied fields.