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ATOM-RYDBERG ATOM COLLISIONAL PROCESSES IN THE BRL REGION OF AGNs

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The significance of hydrogen atom–Rydberg atom collisions in AGN has been investigated. The results may be useful for the diagnostics, modelling, and confirmation of existence of very dense weakly ionized domains in clouds in broad-line region of active galactic nuclei. Moreover, the results of the present work suggest that the investigated processes are of interest for the research of Rydberg states of hydrogen and for the study of their influence during the cosmological recombination epoch.