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RYDBERG ATOMS IN ASTROPHYSICS: NEW RESULTS

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Elementary processes in astrophysical phenomena traditionally attract researchers attention. This can be attributed to a group of ionization and excitation processes in Rydberg atom collisions with ground state parent atoms (Mihajlov et al. 2011). In this work we review the state-of-art of the study of these processes making special emphasis on the most relevant features regarding the dynamical mechanisms which govern these reactive collisions. We show that the atoms and molecules in Rydberg's states are important for the astrophysics of cold stars and cosmic objects from various reasons.

References

Mihajlov, A. A., Ignjatović, L. M., Srećković, V. A., Dimitrijević, M. S.: 2011, *ApJS*, **2** 193.