Progress Report

## CHEMI-IONIZATION/RECOMBINATION PROCESSES IN THE BROAD-LINE REGION OF AGNs

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The importance of Chemi-ionization processes in  $H^*(n) + H(1s)$  collisions in AGN BLR clouds has been investigated. These processes must have influence on ionization and the populations of hydrogen highly excited atoms in moderately ionized layers of dense parts of the BLR clouds. From the results it follows that these investigated processes are of interest for the research and modelling of such medium. The obtained results could be also useful for modeling of different stellar atmospheres, as well as for the investigation of Rydberg states of hydrogen and for the study of their influence during the cosmological recombination epoch (se e.g. Mihajlov et al. 2011).

## References

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