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Poster

STARK BROADENING DEPENDENCE ON THE UPPER LEVEL IONIZATION POTENTIAL WITHIN DIFFERENT SERIES OF THE NEUTRAL MAGNESIUM SPECTRAL LINES

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Electron and proton impact Stark width dependences on the upper level ionization potential within different series of the neutral magnesium spectral lines have been studied. It was found that the dependences previously observed for the electron contribution also exist for the proton impact contribution to the Stark broadening parameters. The emphasis is on the fine structure influence on the studied Stark parameter dependences. The found relations can be used in both cases for prediction of new Stark broadening data, thus avoiding more complicated procedures.