

*Poster*

## ANSWERS TO SOME IMPORTANT QUESTIONS ON THE USE OF GR MODEL

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After a decade of using the GR model (Gauss-Rotation model) many interesting questions have been arisen concerning the physics and the mathematical expression of the model, as well as the exact number of components that are required to reproduce the complex absorption and emission profiles and the uniqueness of the calculated values of the parameters (kinematical parameters, the optical depth the Full Width at Half Maximum (FWHM), the column density and the absorbed or emitted energy), which are calculated with this method. In this paper we try to answer some of these basic questions.

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## ON THE STARK BROADENING OF Lu III SPECTRAL LINES

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The electron-impact widths for six Lu III spectral lines have been calculated by using the modified semiempirical method. With obtained results, the influence of Stark broadening on Lu III lines has been investigated in the spectra of A-type stars.