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APPLICATION OF THE NEW RADIATIVE-COLLISIONAL CODE GSM IN ASTROPHYSICS

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GSM, Generalized Spectra Modeling, is an extensive radiative-collisional code developed at the Ohio State University (Justin Oelgoetz). It considers spectra with multiple ionization stages. As a natural extension of a previous code for modeling lines ratios of He-like ions, it allows among other improvements, treatment of satellite lines and lines arising from bound state with the same methodology, whatever ionization stages they come from. It uses the latest available data as tabulated data, fitted formulas or numerical calculations, being able of carrying out either steady state or time dependent numerical simulations. In this talk, I will present recent results from this code relevant to astrophysical applications.