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Friday–Saturday, November 12–13, 2021; Virtual; Eastern Time

Session C01: Lightning Sessions Student Posters
2:15 PM, Friday, November 12, 2021

Chair: Colin Campbell, University of Mount Union

Abstract: C01.00010 : Recent determination of solar oxygen abundance and atomic data*

Preview Abstract

← *Abstract* →

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Radiative models for plasma abundacnes in an astromonical object, such as, the Sun, require parameters of atomic processes, such as, photoionization, photo-excitations, electron-impact excitations. The accuracy of the atomic parameters need to be of high accuracy and consistent for modeling them in various plasma conditions. Bergemann et al (MNRAS 2021) recently reported solar photospheric oxygen abundance with emphasis on using an accurate "new atomic models" and found largely good agreement with the existing predictions for the oxygen abundance. This report will illustrate that their atomic model is consisting of inconsistent and inaccurate atomic data, and good agreement with others questions the accuracy of the treatment of their model.

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