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# Opacities: recent theoretical developments

Franck Delahaye<sup>\*1</sup>

<sup>1</sup>LERMA – École normale supérieure - Paris, Institut National des Sciences de l'Univers, Observatoire de Paris, Sorbonne Université, Centre National de la Recherche Scientifique, CY Cergy Paris Université  
– France

## Abstract

A detail comparison between the 2 main methods to calculate opacities hare being reviewed. While trying to understand the differences between the measured Fe opacities at the Sandia National Laboratory and all theoretical calculation, a new set of monochromatic opacities for some Fe ions, important contributor to the Rosseland opacities for the Physical conditions characterizing the base of the Solar convection zone, has been calculated in the framework of the Opacity Project. This new set is being tested on solar models and the effect on radiative accelerations will presented. These new results pave the way in defining the best way for new calculations for the Opacity Project to prepare a new release of monochromatic opacities, Rosseland and Plank means as well as radiative accelerations.

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<sup>\*</sup>Speaker