Simulations of early F-type to late A-type main-sequence and sub-giant stars

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Abstract

We present preliminary results of supercomputer simulations of stellar atmospheres warmer than the Sun (with effective temperatures of up to 9000 K) obtained with the ANTARES numerical code. The data will be used as benchmark to improve multi-dimensional radiation-hydrodynamic modeling for this type of stellar objects and as the basis for computations of synthetic spectra and other observable signatures of the characteristic physical properties of relevant stars.

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