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Beyond Mixing-Length Theory: an advanced approach to treating convective energy transfer in stars.

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Abstract content
   (Max 300 words)
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The heat transfer rates predicted by the Full Spectrum of Turbulence (FST) model of stellar convection differ significantly from those predicted by Mixing Length Theory. The difference is due to the inclusion of the entire range of scales of turbulence rather than the single scale assumption of MLT. Inclusion of these scales leads to a new governing equation for the calculation of the convective heat flux in the stellar interior. We discuss the key ingredients of the FST model and comment on its application to stars.

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PhD

Main supervisor (name and email)
and his / her institution

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