

# GREAT-ESF Workshop

## Stellar Atmospheres in the Gaia Era: Quantitative Spectroscopy and Comparative Spectrum Modelling

Free University Brussels - VUB  
Building D Campus Oefenplein  
23 & 24 June 2011

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# Discussion Session III

**C 1:** A number of large surveys are under way. What additional surveys would be needed to substantially advance our knowledge of stellar atmospheres (both for cool and hot stars)?

**C 2:** What are the most important atomic and molecular data that should be improved or determined for realistic modelling of hot and cool star spectra? Which species and/or which type of data, e.g. level energies, transition probabilities, line broadening parameters, ...; what wavelength region?

# Discussion Session III

**C 3:** Do the standard models used for spectroscopic analysis of massive hot stars (1-D, spherical symmetric, stationary wind, full line blanketing) provide sufficiently accurate stellar and wind parameters? Are we neglecting important physical mechanisms, such as micro- and macro-clumping, radiative instabilities, non-spherical winds?