Sounding Stellar Heartbeats from Asteroseismology

After a broad general introduction in the research area of asteroseismology, we illustrate how the CoRoT and Kepler space missions currently revolutionise our view on stellar interiors. The immense advantage of having long-term uninterrupted data from space with a factor 100 better precision compared to data from ground-based telescopes implies large progress in the tuning of stellar physics. While most previous studies relied on oscillations which pass through the outermost layers of the star, we focus on a few recent cases where a particular type of oscillations which pass through the whole star were detected and allowed to tune the stellar core.

The science lecture (ca. 1 hour) is followed by a Question & Answer period on issues specific to career development of women in academia (e.g., options, barriers, how to overcome them, good practices and strategies).

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