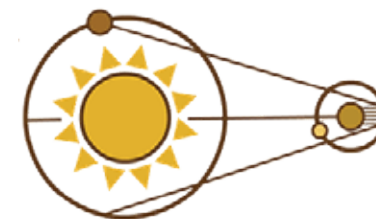


Aarhus University presents

The Ole Rømer Colloquium Series



Thursday, September 9th @ 15:15 (sharp!)
Physics Auditorium

Professor Conny Aerts

Institute of Astronomy
KU Leuven
Leuven, Belgium

Asteroseismology : the Royal Road towards Stellar Interiors

It is an honour to present a Roemer Colloquium about a passion called asteroseismology. The colloquium will start with a rather personal road towards this branch of mathematical physics. Once arrived in the space age of asteroseismology, which started about a decade ago, we discuss the diversity occurring in the types of nonradial oscillations of stars and make the link with pressure, gravity, magnetic, and tidal waves. We then emphasize some of the breakthroughs derived from space asteroseismology, such as high-precision sizing, weighing, and ageing of stars of low mass and highlight how that helps exoplanet and archaeological studies of the Milky Way. We then turn our attention to stars of higher mass and faster rotation and point out how asteroseismology can help predictions of the chemical enrichment of the Milky Way. We end with the glorious future potential of asteroseismology thanks to the ongoing NASA TESS and future ESA PLATO space missions.

At the University Celebration 10 September Aarhus University will confer the degree of Honorary Professor to Conny Aerts.

Students & staff are all invited!

15:00-15:15: Informal discussions, cake & coffee

15:15-16:15: Seminar and Q&A

16:15-16:45: Special session between students & speaker