



RSPP seminars



UNIVERSITY OF
LEICESTER

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“NEMESIS”

The NEMESIS radiative transfer and retrieval model has in the 16 years since its original development in 2003 become one of the most widely used and trusted atmospheric spectral interpretation algorithms in international planetary physics. Originally developed to process observations of Saturn and Titan with CIRS (Composite Infrared Spectrometer) on the NASA Cassini spacecraft, NEMESIS has been continually updated and extended during its short life and has now been applied to interpret observations of ALL solar system planets that have atmospheres. In addition, NEMESIS has also been extended to model the observed spectra of exoplanets. In this talk I will go over the development of NEMESIS and highlight its application to a range of planetary atmospheres including giant planet observations by Leigh Fletcher’s group here in Leicester, Titan observations by Nick Teanby’s group in Bristol and my own ground-based observations of Uranus and Neptune. In addition, I will outline recent developments in the modelling of exoplanetary phase curve spectra with NEMESIS.

Wednesday, November 6th at 2 pm in **Physics LTD**