KARL-FRANZENS-UNIVERSITÄT GRAZ
UNIVERSITY OF GRAZ
Institut für Physik | Geophysik, Astrophysik und Meteorologie

Das Institut für Physik

Institutsbereich Geophysik, Astrophysik und Meteorologie

lädt zu folgendem Vortrag

im Rahmen des **Astrophysikalischen Kolloquiums** ein:

"Boyajian's star and friends: Strange dips and an unsolved mystery"

Prof. Dr. Hans Deeg
Instituto de Astrofísica de Canarias (IAC), Tenerife, Spain

KIC 8462852, also known as Tabby's or Boyajian's star, was an astronomical highlight in 2016, following its discovery in legacy data from the Kepler space mission. Between 2009 and 2013, the star had experienced several strong brightness variations that were unlike that of any other known astronomical object. Posterior, an intense ground-based observing campaign was initiated to closely survey this target. From the numerous smaller posterior dips that have been detected, competing hypotheses for 928 day or 1574 day periodicities of the events have been proposed. These later brightness variations showed also colour-signatures which are compatible with the dips caused by dusty planetesimals or 'exo-comets' - which does not disprove alternative explanations. Several stars with some similarities to Tabby's star have been identified, with an outstanding case found by ASAS-SN in 2019, displaying a deep dip closely resembling those observed by Kepler. A detailed re-observation of such a deep event would provide much better insight into the nature of this phenomena, which is the topic of an ongoing project using the 10m GTC telescope.

Time: **Wednesday, December 2, 2020, 17:00 CET (st!)**

Meeting: **https://unigraz.webex.com/meet/paul.beck**

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