Workshop

Stellar End Products: The Low Mass - High Mass Connection

ESO Garching, 6-10 July, 2015

Vogt, Nikolaus

Title: A multi-periodicity analysis of selected MIRA type variables in the ASAS database

Abstract:

During a systematic determination of the ephemeris data of Mira variable stars in ASAS, we found about 50 stars with significant multi-periodicity. We determined their periods with a program based on Discrete Fourier Transform (PERIOD 04) and analyzed the relations between them in the same way as Fuentes-Morales & Vogt (2014: AN 335, 1072), searching for sequences in the "double period" and the "Petersen" diagrams. Since we suppose that most of these stars could belong to the semi-regular type, we compare our results with the variability class obtained by Richards et al. (2012: ApJS 203, 32).