

# The $m_1$ Index in RR Lyrae Stars

Eloy Rodríguez, Angel Rolland & Pilar López de Coca

*Instituto de Astrofísica de Andalucía,  
Apartado 3004, 18080-Granada, Spain.*

## Abstract

We have carried out simultaneous *uvby $\beta$*  photometry for several RR Lyrae stars. For each of these stars, the observed  $m_1$  index variation along the pulsation cycle is compared with that expected variation from the ( $\Delta m_1^*$ ,  $\beta$ ) grids of Rodríguez *et al.* (1991) for the corresponding temperatures, gravities and metallicities. The  $m_1$  index variations are also calculated using the Kurucz's models. Good agreement is found

# *B, V* Photometry of the Variable Star V9 in the Globular Cluster 47 Tuc

Michael Corwin<sup>1</sup> & Bruce Carney<sup>2</sup>

<sup>1</sup>*Dept. Astronomy, University of North Carolina, Charlotte NC 28223, U.S.A.*

<sup>2</sup>*Dept. Physics & Astronomy, Univ. North Carolina, Chapel Hill, NC 27599, U.S.A.*

## Abstract

We present *BV* CCD photometry of the variable star V9 in the globular cluster 47 Tuc. *V*, *B*, and (*B* - *V*) light curves are given. A colour-magnitude diagram based on four *V* and four *B* frames is given. V9's location on the diagram is considerably brighter and bluer than the edge of the red horizontal branch. Its radial velocity indicates that V9 is a member of the cluster.