

MEMORIE DELLA SOCIETÀ ASTRONOMICA ITALIANA

Vol.87 n.2 2016

**AGB stars: a key ingredient in the understanding and interpretation of stellar populations**

European Week of Astronomy and Space Science

*La Laguna, Tenerife, June 22-26, 2015*

*editors:* P. Ventura, D. A. García-Hernández, M. Groenewegen, J. Th. van Loon

**TABLE OF CONTENTS**

<i>Index</i>	225
<i>Foreword</i>	227
A.I. Karakas <i>The role of asymptotic giant branch stars in galactic chemical evolution</i>	229
A. Yagüe, D.A. García-Hernández, P. Ventura, M. Lugaro <i>S-process nucleosynthesis in AGB models with the FST prescription for convection</i>	237
F. D'Antona and P. Ventura <i>Hot CNO and p-capture nucleosynthesis in intermediate mass AGB stars</i>	243
L. Mattsson <i>Winds of AGB stars: the two roles of atmospheric dust</i>	249
F. Dell'Agli, D.A. García-Hernández, P. Ventura, R. Schneider, M. Di Criscienzo, and C. Rossi <i>Dust from AGBs: understanding the Spitzer observations of evolved stars in the Large Magellanic Cloud</i>	255
G. Rau, C. Paladini, J. Hron, B. Aringer, M.A.T. Groenewegen, and W. Nowotny <i>Modelling a set of C-rich AGB stars: the cases of RU Vir and R Lep</i>	260
O. Zamora <i>Circumstellar effects on the chemical abundances in AGB stars</i>	265
M.L. Boyer <i>recent observations of AGB stars in nearby galaxies and future perspectives</i>	269
A. Javadi, J. Th. van Loon, and H. Khosroshahi <i>The role of AGB stars feedback in sustaining galaxy evolution</i>	278

A. Mucciarelli <i>The chemical composition of AGB stars in globular clusters</i>	284
A.F. Marino <i>Chemical abundances of multiple stellar populations in globular clusters: the role of asymptotic giant branch stars</i>	289
J.J. Díaz-Luis, D.A. García-Hernández, N. Kameswara Rao, A. Manchado, and F. Cataldo <i>First evidence of the possible detection of diffuse circumstellar bands in AGB descendants</i>	295
S. Madonna, J. García-Rojas, V. Luridiana, N.C. Sterling, and C. Morisset <i>A window on the efficiency of the s-process in AGB stars: chemical abundances of n-capture elements in the planetary nebula NGC 3918</i>	299
A.P. Milone <i>Multiple populations in Globular Clusters from multi-wavelength HST photometry</i>	303
C. Rossi, V.F. Polcaro, O. Maryeva, R. Gualandi, R. Nesci, A. Chieffi, and R.F. Viotti <i>Past, Present and Future of the luminous variable Romano's Star in M33</i>	307
R. Smolec <i>Dynamical phenomena in the pulsation of type II Cepheids models</i>	311
G. Tautvaišiene, R. Smiljanic, V. Bagdonas, A. Drazdauskas, and Š. Mikolaitis <i>The role of asymptotic giant branch stars in the chemical evolution of the Galaxy</i>	315