

CURRICULUM VITÆ: MANUELA ZOCCALI

ASSOCIATE PROFESSOR, PUC

PERSONAL INFORMATION

Name: Manuela
Surname: Zoccali
Birth place: Reggio Calabria, Italy
Birth date: September 11th, 1971
Citizenship: Italian
Current Position: Profesor Asociado
Departamento de Astronomía y Astrofísica
P. Universidad Católica de Chile
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SPOKEN LANGUAGES

Italian: mother tongue
English: fluent
Spanish: fluent
French: basic

EDUCATIONAL BACKGROUND

1995 — Laurea (Bachelor) Degree in Astronomy, Università di Padova, Italy (*Magna cum Laude*)
Thesis title: *Funzione di luminosità e di massa dell'ammasso globulare galattico NGC1261*.
Advisors: Prof. M. Capaccioli, Prof. G. Piotto
2000 — PhD in Astronomy, Università di Padova, Italy (no marks for Phd, in Italy)
Thesis title: *Observational Constraints on the Evolutionary and Dynamical Properties of Low Mass Stars*.
Advisor: Prof. G. Piotto

EMPLOYMENT HISTORY

2000 – 2003 Post-doctoral Fellowship at the European Southern Observatory (ESO), Garching bei München, Germany
2003 – 2004 Post-doctoral Princeton-PUC Prize Fellowship between the University of Princeton (NJ, USA) and the P. Univ. Católica de Chile.
2004 – 2008 Assistant Professor, P. Universidad Católica de Chile.
2008 – Present Associate Professor, P. Universidad Católica de Chile.

PRIMARY RESEARCH INTERESTS

Stellar Populations, Globular Star Clusters, The Galactic Bulge, Stellar Abundances, The Initial Mass Function, Galaxy Formation and Evolution.

TEACHING

2004 – 2009 Teaching of Astronomy courses for Astronomy students at the undergraduate (*Astronomy, Astronomy Lab I and II, Galactic Astronomy*) and graduate levels (*Topics in Astrophysics, Galaxy Formation*).
Physics courses for undergraduate Engineering students (*Classical Mechanics*).
2005 – 2009 Advisor of 2 PhD (F. Marino, P. Amigo), 2 M.Sc. (D. Castillo, F. Molina) and 5 B.Sc. (O. Palma, P. Lapuente, C. Vega, O. Gonzalez, M.L. Alonso, S. Vasquez) Theses at PUC
1997 – 2000 Co-advisor of 2 *Laurea* Theses at the Università di Padova (E. Pancino, L. Bedin)

OUTREACH ACTIVITIES

1987 – 1989 Amateur Observatory nights / public talks / lectures at the Planetary - Reggio Calabria, Italy
2006 – 2009 Several Public Conferences in Chile and in Reggio Calabria (Italy).
2005 – 2007 Observatory nights / public talks at the UC Observatory (Chile)

RESEARCH GRANTS

1993 — Summer Grant at the Instituto de Astrofísica de Canarias, Tenerife, Spain
1996 — Grant from Università di Padova + Grant from the Canadian Government for a 7 month research visitorship at the Dominion Astrophysical Observatory, Victoria, Canada
1999 — Visitorship grant at the European Southern Observatory, Garching bei Muenchen, Germany
2005 — PI, VRAID Proyecto de Inicio Carrera 2005/08PI, *The Formation of the Galactic Bulge* (Chile)
2005 — Co-I, **Centro de Astrofísica FONDAP** (Conicyt, Chile)
2006 — Investigador Patrocinante, FONDECYT Post-Doctoral Fellowship 3060096, Dr. C. Weidner, *The Stellar Initial Mass Function* (Conicyt, Chile)
2006 — Co-I, CNPq/CONICYT International Scientific Collaboration Program 018/DRI/061, *The Sun in Time: The History of Evolution of the Angular Momentum in the Sun* (Conicyt, Chile)
2008 — PI, **FONDECYT Regular 1085278**, *Formation and Evolution of the Milky Way Spheroid* (Conicyt, Chile)

2008 — Co-I, Centro de Astrofísica y Tecnologías Afines, **Proyecto BASAL** (Conicyt, Chile)
2009 — Co-I, The Milky Way **Millennium Nucleus** (Mideplan, Chile)

THESES DIRECTED

6 B.Sc. Thesis in Astrophysics: O. Palma, 2005; P. Lapuente, C. Vega, 2007; O. Gonzalez, M.L. Alonso, 2008; S. Vasquez, ongoing (PUC Chile)
2 M.Sc. Thesis in Astrophysics: D. Castillo, F. Molina, 2008 (PUC, Chile)
2 PhD Thesis in Astrophysics (F. Marino, ongoing (co-tutorship for a joint degree with Univ. di Padova); P. Amigo, ongoing (PUC, Chile)

ADMINISTRATION, COMMITTEE WORK, REFEREEING (summary)

- [at ESO] Commissioning, testing and service observing for FLAMES, the new multi-fiber spectrograph at VLT.
- [at ESO] Organization of the weekly Journal Club.
- Organization of DAA Colloquia, Sep 2004 – Nov 2004.
- Director of UC Observatory, from Dec 2004 to Mar 2007.
- Responsible of the Lab activities in the Teaching Committee, Physics Faculty, PUC, since Mar 2007
- Member of the Graduate Program Committee, since Aug 2008
- Referee of papers for the international journals *Astronomy and Astrophysics*, *Astrophysical Journal*
- Referee for the FONDECYT Research Projects (Chile) and the CONICET Research Projects (Argentina)
- Organization of the Third Chilean Advanced School of Astrophysics, *Insight into Galaxy Evolution from Resolved Stellar Populations*, Concepción, Jan 2007
- Member of the ESO Observational Program Committee OPC (2007-2008)
- Member of the Chilean Time Allocation Committee CNTAC (2008-2009)
- Chilean Representative in the ESO User Committee ESO-UC (2009-2012)

IT KNOWLEDGE

Operating Systems: UNIX, LINUX
Programming Languages: Fortran, Supermongo, Unix Shell Script
Astronomical Software: IRAF, MIDAS, various instrument pipelines
Stellar Photometry packages (DAOPHOTII/ALLFRAME),
High-Res. spectrum analysis codes (Spite's codes, MOOG)

OBSERVATIONAL EXPERIENCE

DAO – VICTORIA : 1.85m Telescope: Optical Imaging
1.85m Telescope: Long Slit Spectroscopy
ESO – LA SILLA : 1.54m Danish, DFOSC: Optical Imaging
NTT, EMMI: Optical Imaging, Long Slit Spectroscopy
NTT, SOFI: Near-IR Imaging
ESO – PARANAL : 8.2m VLT-FLAMES: Multi-Fibre Spectroscopy: Commissioning, Visitor Support and Service Observations
8.2m VLT-UVES: Echelle Spectroscopy: Service Observations
8.2m VLT-NAOS-CONICA: Near-IR Adaptive Optics Imaging
8.2m VLT-FORS2: MXU Multi-Object Spectroscopy
8.2m VLT-HAWK-I: Near-IR imaging
LAS CAMPANAS: 6.5m MAGELLAN, PANIC: Near Infrared Imaging
6.5m MAGELLAN, IMACS: Imaging, Multi-Object Spectroscopy
HST: WFPC2: imaging
NICMOS: imaging

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Italian Astronomical Society (SAIt, 1987- 2005)
Chilean Astronomical Society (SOCHIAS, since 2004)

TALKS, SEMINARS and COLLOQUIA in the last 2 years

- Nov 2009 – *La Vía Láctea / The Milky Way*
2 Public Conferences in Iquique, Chile; within the Explora-Conicyt Project *Puro Chile*
- Aug 2009 – *The Galactic Bulge and Center*
invited review talk at the IAU Symposium 265, Rio de Janeiro, Brazil
- Jan 2009 – *The Stellar Population of the Inner Galaxy*
talk at the Annual Meeting of Chilean Astronomical Society, Santiago, Chile
- Nov 2008 – *Chemical Abundances in the Galactic Bulge*
Invited talk, Workshop on “Numerical Astronomy”, Buenos Aires, Argentina
- Nov 2008 – *La Vía Láctea / The Milky Way*
Public Conference at the Outreach Center of PUC
- Aug 2008 – *Chemical Abundances in the Galactic Bulge*
Dep.to de Astronomía, Universidad de Chile, Santiago
- Jun 2008 – *Chemical Abundances in the Galactic Bulge*
talk at the Conference “The Cosmic Odyssey of the Elements”, Egina, Greece
- Jul 2008 – *Chemical Abundances in the Galactic Bulge*
talk at the Conference “Chemical Evolution of Globular Clusters and Dwarf Galaxies”, Garching, Germany

- Oct 2007 – *Formation and Evolution of the Galactic Bulge*
Invited review talk, XII Latin-American Regional Meeting of the IAU, Isla de Margarita, Venezuela
- Sep 2007 – *The Stellar Population of the Galactic Bulge*
Invited review talk, 50th Annual Meeting of the Asociación Argentina de Astronomía, Malargüe, Argentina

PUBLICATIONS IN INTERNATIONAL REFEREED JOURNALS (most important ones highlighted):

Total Number of Refereed Articles: 63 [total citations 1957]

Nr. Of Articles as 1st author: 12 [total citations 622]

1. Barbuy B., **Zoccali M.**, Ortolani S., Hill V., Minniti D., Bica E., Renzini A., Gomez A. (2009) *VLT-FLAMES analysis of 8 giants in the bulge metal-poor globular cluster NGC 6522: oldest cluster in the Galaxy?. Analysis of 8 giants in NGC 6522*, A&A, 507, 405 [0 citations]
2. Pietrukowicz P., Minniti D., Fernandez J.M., Pietrzynski G., Ruiz M.T., Gieren W., Diaz R.F., **Zoccali M.**, Hempel M. (2009) *Deep census of variable stars in a VLT/VIMOS field in Carina*, A&A, 503, 651 [1 citation]
3. **Zoccali M.**, Pancino E., Catelan M., Hempel M., Rejkuba M., Carrera R. (2009) *The Radial Extent of the Double Subgiant Branch of NGC1851*, ApJ, 697, L22 [2 citations]
4. Iannicola G., Monelli M., Bono G., Stetson P.B., Buonanno R., Calamida A., **Zoccali M.**, Caputo F., Castellani M., Corsi C.E., Dall'Ora M., Di Cecco A., Degl'Innocenti S., Ferraro L., Nonino M., Pietrinferni A., Pulone L., Prada Moroni P.G., Romaniello M., Sanna N., Walker A.R. (2009) *On the Radial Distribution of Horizontal Branch Stars in NGC 2808*, ApJ, 696, L120 [1 citation]
5. Brown T.M., Sahu K., **Zoccali M.**, Renzini A., Ferguson H.C., Anderson J., Smith E., Bond H.E., Minniti D., Valenti J.A., Casertano S., Livio M., Panagia N., Vandenberg D.A., Valenti E. (2009) *The WFC3 Galactic Bulge Treasury Program: A First Look at Resolved Stellar Population Tools*, ApJ, 137, 3172 [1 citation]
6. Zorotovic M., Catelan M., **Zoccali M.**, Pritzl B.J., Smith H.A., Stephens A.W., Contreras R., Escobar M.E. (2009) *The Globular Cluster NGC 5286. I. a New CCD BV Color-Magnitude Diagram*, AJ, 137, 257 [4 citations]
7. Clarkson W., Sahu K., Anderson J., Smith T.E., Brown T. M., Rich R.M., Casertano S., Bond H.E., Livio M., Minniti D., Panagia N., Renzini A., Valenti J., **Zoccali M.** (2008) *Stellar Proper Motions in the Galactic Bulge from Deep Hubble Space Telescope ACS WFC Photometry*, ApJ, 684, 1110 [11 citation2]
8. Pont F. et al. (2008) *A transiting planet among 23 new near-threshold candidates from the OGLE survey – OGLE-TR-182*, A&A, 487, 749 [21 citations]
9. Udalski A., Pont F., Naef D., Melo C., Bouchy F., Santos N.C., Moutou C., Díaz R.F., Gieren W., Gillon M., Hoyer S., Mayor M., Mazeh T., Minniti D., Pietrzyński G., Queloz D., Ramirez S., Ruiz M.T., Shporer A., Tamuz O., Udry S., **Zoccali M.**, Kubiak M., Szymański M.K., Soszyński I., Szweczyk O., Ulaczyk K., Wyrzykowski Ł. (2008) *OGLE-TR-211 - a new transiting inflated hot Jupiter from the OGLE survey and ESO LP666 spectroscopic follow-up program*, A&A, 482, 299 [12 citations]
10. **Zoccali M.**, Hill V., Lecureur A., Barbuy B., Renzini A., Minniti D., Gomez A., Ortolani S. (2008) *The Metal Content of Bulge Field Stars from FLAMES-GIRAFFE Spectra. I. Stellar Parameters and Iron Abundances*, A&A, 486, 177 [31 citations]
11. Hoyer S., Ramírez Alegría Sebastián, Ivanov V.D., Minniti D., Pietrzyński G., Ruíz M.T., Gieren W., Udalski A. **Zoccali M.**, Carrasco E.R., (2007) *Millimagnitude Photometry for Transiting Extrasolar Planetary Candidates. IV. Solution to the Puzzle of the Extremely Red OGLE-TR-82 Primary*, ApJ, 669, 1345 [2 citation]
12. Busso G., Cassisi S., Piotto G., Castellani M., Romaniello M., Catelan M., Djorgovski S.G., Recio Blanco A., Renzini A., Rich M.R., Sweigart A.V., **Zoccali M.** (2007) *The Peculiar Horizontal Branch Morphology of the Galactic Globular Clusters NGC 6388 and NGC 6441: new insights from UV observations*, A&A, 474, 105 [32 citations]
13. Barbuy B., **Zoccali M.**, Ortolani S., Minniti D., Hill V., Renzini A., Bica E., Gomez A. (2007) *NGC 6558: A Blue Horizontal Branch Moderately Metal-Poor Globular Cluster in the Bulge*, AJ, 134, 1613 [7 citations]
14. Ortolani S., Barbuy B., Bica E., **Zoccali M.**, Renzini A. (2007) *Distances of the bulge globular clusters Terzan 5, Liller 1, UKS1 and Terzan 4 based on HST NICMOS photometry*, A&A, 470, 1043 [11 citations]
15. Casares J., Bonifacio P., Gonzalez Hernandez J.I., Molaro P., **Zoccali M.** (2007) *The isotopic ⁶Li/⁷Li ratio in Cen X-4 and the origin of Li in X-ray binaries*, A&A, 470, 1033 [4 citations]
16. Bonifacio P., Pasquini L., Molaro P., Carretta E., Francois P., Gratton R., James G., Sbordone L., Spite F., **Zoccali M.** (2007) *Variations in the lithium abundances of turn off stars in the globular cluster 47 Tucanae*, A&A, 470, 153 [11 citations]
17. Minniti D., Fernández J.M., Diaz R.F., Udalski A., Pietrzynski G., Gieren W., Rojo P., Ruíz M.T., **Zoccali M.** (2007) *Millimagnitude Photometry for Transiting Extrasolar Planetary Candidates. III. Accurate Radius and Period for OGLE-TR-111-b*, ApJ, 660, 858 [12 citations]
18. Díaz R. F., Ramírez S., Fernández J.M., Gallardo J., Gieren W., Ivanov V., Mauas P., Minniti D., Pietrzynski G., Perez F., Ruíz M.T., Udalski A., **Zoccali M.** (2007) *Millimagnitude Photometry for Transiting Extrasolar Planetary Candidates. II. Transits of OGLE-TR-113-b in the Optical and Near-IR*, AJ, 660, 850 [7 citations]
19. Lecureur A., Hill V., **Zoccali M.**, Barbuy B., Gomez A., Minniti D., Ortolani S. and Renzini A. (2007) *Light elements in the Galactic bulge: Anticorrelations of oxygen-sodium and magnesium-aluminum*, A&A, 465, 799 [51 citations]
20. Carraro G., Moitinho A., **Zoccali M.**, Vázquez R., Baume G. (2007) *Photometry of a Galactic Field at l=232°, b=-6°: The Old Open Cluster Auner 1, the Norma-Cygnus Spiral Arm, and the Signature of the Warped Galactic Thick Disk*, AJ, 133, 1058 [7 citations]
21. Alves-Brito A., Barbuy B., **Zoccali M.**, Minniti D., Ortolani S., Hill V., Renzini A., Pasquini L., Bica E., Rich R.M., Meléndez J., Momany Y. (2006) *VLT-UVES abundance analysis of four giants in NGC 6553*, A&A, 460, 269 [12 citations]

22. Sahu K.C., Casertano S., Bond H.E., Valenti J., Smith E.T., Minniti D., **Zoccali M.**, Livio M. et al. (2006) *Transiting extrasolar planetary candidates in the Galactic Bulge*, Nature, 443, 534 [30 citations]
23. **Zoccali M.**, Lecureur A., Barbuy B., Hill V., Renzini A., Minniti D., Momany Y., Gomez, A., Ortolani S., (2006) *Oxygen abundances in the Galactic Bulge: evidence for fast chemical enrichment*, A&A, 457, L1 [54 citations]
24. Fernandez J.M., Minniti D., Pietrzynski G., Gieren W., Ruiz M.T., Zoccali M., Udalski A., Szeifert T., (2006) *Millimagnitude Optical Photometry for the Transiting Planetary Candidate OGLE-TR-109*, ApJ, 647, 587 [7 citations]
25. Barbuy B., **Zoccali M.**, Ortolani S., Momany Y., Minniti D., Hill, V., Renzini A., Rich R.M., Bica, E., Pasquini L., Yadav, R.K.S., (2006) *VLT-UVES analysis of two giants in the bulge metal-poor globular cluster HP1*, A&A, **449**, 349 [17 citations]
26. Rejkuba M., da Costa G.S., Jerjen H., **Zoccali M.**, Binggeli B., (2006) *Dwarf elliptical galaxies in Centaurus A group: stellar populations in AM 1339-445 and AM 1343-452*, A&A, **448**, 983 [10 citations]
27. Bastian N, Saglia R.P., Goudfrooij P, Kissler-Patig M., Maraston C., Schweizer F., **Zoccali M.** (2006) *Dynamical mass estimates for two luminous star clusters in galactic merger remnants*, A&A, **448**, 881 [52 citations]
28. Castellani V., Iannicola G., Bono G., **Zoccali M.**, Cassisi S., Buonanno R., (2006) *On the horizontal branch of the galactic globular cluster NGC 2808*, A&A, **446**, 569 [19 citations]
29. Busso G., Moehler S., **Zoccali M.**, Heber U., Yi S.K., (2005) *Hot Subdwarfs in the Galactic Bulge*, ApJ, 633, L29 [9 citations]
30. Gallart C., **Zoccali M.**, Aparicio A., (2005) *The Adequacy of Stellar Evolution Models for the Interpretation of the Color-Magnitude Diagrams of Resolved Stellar Populations*, ARA&A, **43**, 387 [73 citations]
31. Altmann M., Catelan M., **Zoccali M.**, (2005) *Searching for merger debris in the Galactic halo: chemodynamical evidence based on local blue HB stars*, A&A, **439**, L5 [7 citations]
32. Alves-Brito A., Barbuy B., Ortolani S., Momany Y., Hill V., **Zoccali M.**, Renzini A., Minniti D., Pasquini L., Bica E., Rich R.M. (2005) *VLT-UVES analysis of 5 giants in 47 Tucanae*, A&A, **435**, 657 [22 citations]
33. Recio-Blanco A., Piotto G., de Angeli F., Cassisi S., Riello M., Salaris M., Pietrinferni A., **Zoccali M.**, Aparicio A., (2005) *A homogeneous set of globular cluster relative distances and reddenings*, A&A, **432**, 851 [17 citations]
34. Di Fabrizio L., Clementini G., Maio M., Bragaglia A., Carretta E., Gratton R., Montegriffo P., **Zoccali M.** (2005) *Variable stars in the bar of the Magellanic Cloud: The photometric catalogue*, A&A, **430**, 603 [13 citations]
35. Ortolani S., Bica E., Barbuy B., **Zoccali M.** (2005) *The old open clusters Berkeley 36, Berkeley 73 and Biurakan 13 (Berkeley 34)*, A&A, **429**, 607 [7 citations]
36. Pasquini L., Randich S., **Zoccali M.**, Hill V., Charbonnel C., Nordstrom B., (2004) *Detailed chemical composition of the open cluster IC4651: The iron peak, alpha elements, and Li*, A&A **424**, 951 [31 citations]
37. **Zoccali M.**, Barbuy B., Hill V., Ortolani S., Renzini A., Bica E., Momany Y., Pasquini L., Minniti D., Rich R.M. (2004) *The metal content of the bulge globular cluster NGC6528*, A&A, **423**, 507 [36 citations]
38. Moehler S., Koester D., **Zoccali M.**, Ferraro F.R., Heber U., Napiwotzki R., Renzini A. (2004) *Spectral type and masses of white dwarfs in globular clusters*, A&A, **420**, 515 [19 citations]
39. Rejkuba M., Greggio L., Zoccali M. (2004) *Simulating the recent star formation history in the halo of NGC5128*, A&A, **415**, 915 [10 citations]
40. Melendez J., Barbuy B., Bica E., **Zoccali M.**, Ortolani S., Renzini A., Hill V. (2003) *Gemini-Phoenix infrared high-resolution abundance analysis of five giants in the bulge globular cluster NGC6553*, A&A, **411**, 417 [27 citations]
41. Riello M., Cassisi S., Piotto G., Recio-Blanco A., De Angeli F., Salaris M., Pietrinferni A., Bono G., **Zoccali M.** (2003) *The Red Giant Branch luminosity function bump*, A&A, **410**, 553 [25 citations]
42. Dutra C., Ortolani S., Bica E., Barbuy B., Zoccali M., Momany Y (2003) *NTT infrared imaging of star cluster candidates towards the central part of the Galaxy* A&A, **408**, 127 [19 citations]
43. **Zoccali M.**, Renzini A., Ortolani S., Greggio L., Saviane I., Cassisi S., Rejkuba M., Barbuy B., Rich R.M., Bica E. (2003) *Age and metallicity distribution of the Galactic bulge from extensive optical and near-IR stellar photometry*, A&A, **399**, 931 [159 citations]
44. Bertelli G., Nasi E., Girardi L., Chiosi C., **Zoccali M.**, Gallart C. (2003) *Testing Intermediate-Age Stellar Evolution Models with VLT Photometry of LMC Clusters. III. Padova Results*, AJ, **125**, 770 [24 citations]
45. Woo J.-H., Gallart C., Demarque P., Yi S., **Zoccali M.** (2003) *Testing Intermediate-Age Stellar Evolution Models with VLT Photometry of LMC Clusters. II. Analysis with the Yale Models*, AJ, **125**, 754 [20 citations]
46. Gallart C., **Zoccali M.**, Bertelli G., Chiosi C., Demarque P., Girardi L., Nasi E., Woo J.-H., Yi S. (2003) *Testing Intermediate-Age Stellar Evolution Models with VLT Photometry of LMC Clusters. I. The Data*, AJ, **125**, 742 [26 citations]
47. Piotto G., King I.R., Djorgovski S.G., Sosin C., **Zoccali M.**, Saviane I., De Angeli F., Riello M., Recio-Blanco A., Rich R.M., Meylan G., Renzini A. (2002) *HST color-magnitude diagrams of 74 galactic globular clusters in the HST F439W and F555W bands*, A&A, **391**, 945 [125 citations]
48. Ortolani S., Barbuy B., Bica E., Renzini A., **Zoccali M.**, Rich R.M., Cassisi S. (2001) *HST NICMOS photometry of the reddened bulge globular clusters NGC 6528, Terzan 5, Liller 1, UKS 1 and Terzan 4*, A&A, **376**, 878 [25 citations]
49. **Zoccali M.**, Renzini A., Ortolani S., Bragaglia A., Bohlin R., Carretta E., Ferraro F.R., Gilmozzi R., Holberg J.B., Marconi G., Rich R.M., Wesemael F. (2001) *The White Dwarf Distance to the Globular Cluster 47 Tucanae and its Age*, ApJ, **553**, 733 [61 citations]
50. **Zoccali M.**, Renzini A., Ortolani S., Bica E., Barbuy B. (2001) *The Proper Motion of the Globular Cluster NGC6553 and of Bulge Stars with the Hubble Space Telescope*, AJ, **121**, 2638 [37 citations]
51. Bono G., Cassisi S., **Zoccali M.**, Piotto G. (2001) *Star Counts across the Red Giant Branch Bump and Below*, ApJ, **546**, L109 [28 citations]

52. Bedin, L., Piotto G., **Zoccali M.**, Stetson P.B., Saviane I., Cassisi S., Bono G. (2000) *The anomalous Galactic Globular Cluster NGC 2808*, A&A, **363**, 159 [76 citations]
53. Cassisi S., Castellani V., Ciarcelluti P., Piotto G., **Zoccali M.** (2000) *Galactic globular clusters as a test for very-low-mass stellar models*, MNRAS, **315**, 679 [40 citations]
54. **Zoccali M.**, Cassisi, S., Bono G., Piotto G., Rich R.M., Djorgovski S.G. (2000) *On the Helium Content of Galactic Globular Clusters via the R-Parameter*, ApJ, **538**, 289 [53 citations]
55. **Zoccali M.**, Piotto G. (2000) *Comparison between observed and theoretical Red Giant Branch luminosity functions of galactic globular clusters*, A&A, **358**, 943 [30 citations]
56. Pancino E., Ferraro F.R., Bellazzini M., Piotto G., **Zoccali M.** (2000) *New Evidence for the Complex Structure of the Red Giant Branch in omega Centauri*, ApJ, **534**, 83 [116 citations]
57. **Zoccali M.**, Cassisi, S., Frogel, J. A., Gould, A., Ortolani, S., Renzini, A., Rich, R. M.; Stephens, A. W. (2000) *The Initial Mass Function of the Galactic Bulge down to $\sim 0.15 M_{\odot}$* ApJ, **530**, 418 [93 citations]
58. Behr B.B., Djorgovski S.G., Cohen J.G., McCarthy J.K., Côté P., Piotto G., **Zoccali M.**, (2000), *A New Spin on the Problem of Horizontal-Branch Gaps: Stellar Rotation along the Blue Horizontal Branch of Globular Cluster M13*, ApJ, **528**, 849 [65 citations]
59. Piotto G., **Zoccali M.**, King I.R., Djorgovski S.G., Sosin C., Rich R.M., Meylan G. (1999), *HUBBLE SPACE TELESCOPE Observations of Galactic Globular Cluster Cores. II. NGC 6273 and the Problem of Horizontal-Branch Gaps*, AJ, **118**, 1727 [55 citations]
60. **Zoccali M.**, Cassisi S., Piotto G., Bono G., Salaris M. (1999), *Comparison between Predicted and Empirical ΔV_{HB} in Galactic Globular Clusters*, ApJ, **518**, 49 [60 citations]
61. Piotto G., **Zoccali M.** (1999), *HST luminosity functions of the globular clusters M10, M22, and M55. A comparison with other clusters*, A&A, 345, 485 [80 citations]
62. Piotto G., **Zoccali M.**, King I.R., Djorgovski S.G., Sosin C., Dorman B., Rich R.M., Meylan G. (1999), *HUBBLE SPACE TELESCOPE Observations of Galactic Globular Cluster Cores. I. NGC 6362 and NGC 6934*, AJ, **117**, 264 [32 citations]
63. **Zoccali M.**, Piotto G., Zaggia S.R., Capaccioli M. (1998) *The luminosity and mass function of the globular cluster NGC 1261*, A&A, **331**, 541 [3 citations]