finite-difference numerical code is developed in order to solve the so-called Grad-Shafranov equation describing the equilibrium of these configurations, and some properties of the equilibria obtained are briefly discussed.

[1] Instituto de Astrofísica, Facultad de Física, Pontificia Universidad Católica de Chile, Av. Vicuña Mackenna 4860, 782-0436 Macul, Santiago, Chile.
[2] Departamento de Física, Facultad de Ciencias, Universidad de Chile, Casilla 653, Santiago, Chile.
[3] Argelander Institut für Astronomie, Universität Bonn, Auf dem Hügel 71, D-53121, Bonn, Germany.
* cyarmaza@uc.cl

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OWN SURVEY: RESULTS AFTER SEVEN YEARS OF HIGH-RESOLUTION SPECTROSCOPIC MONITORING OF SOUTHERN O AND WN STARS

R. Barbá[1], R. Gamen[2], J. I. Arias[1], N. Morrell[3], N. R. Walborn[4], J. Maíz Apellániz[5], A. Sota[5], and E. Alfaro[5]

We describe briefly the main results of the high-resolution spectroscopic monitoring survey of southern Galactic O- and WN-type stars. The high-resolution spectroscopic monitoring survey of O and WN stars (*OWN Survey*, Barbá et al. 2010) has completed seven years of sustained campaign, using observational facilities in Chile and Argentina. The selected sample corresponds to those stars for which there is no indication of multiplicity in the Galactic O-star Catalog (Maíz Apellániz et al. 2004) and the VII Catalogue of Galactic WR stars (van der Hucht 2001). We have collected almost 5000 spectra of about 240 O and WN stars. From that sample of 190 O-type stars, we have discovered 146 stars showing radial variations greater than 10 km/s, including 108 new systems, being 56 single-lined spectroscopic binaries, 43 double-lined spectroscopic binaries, and 9 multiple-lined binaries. The new orbital periods spanning from 1.5 to 2200 days. In this work, we present the main result of "OWN Survey": the determination of orbits for over fifty O-type spectroscopic binary systems, and the analysis of the spectral-type, luminosty, period, eccentricity, and mass-ratio distributions. This result is unprecedented in the context of massive binary stars, since we are almost doubling the number of Galactic O-type star systems with known orbits.

[1] Departamento de Física, Universidad de La Serena, Cisternas 1200 N, La Serena, Chile (rbarba@dfuls.cl).
[2] Instituto de Astrofísica de La Plata, Argentina.
[3] Las Campanas Observatory, Chile.
[4] Space Telescope Science Institute, USA.
[5] Instituto de Astrofísica de Andalucía-CSIC, Spain.

COLLISIONS BETWEEN GLOBULAR CLUSTERS

D. T. Belloni[1] and H. J. Rocha-Pinto[1]

The study of globular clusters (GC) plays an important role in our understanding of the Universe since these systems are true laboratories for theories of stellar dynamics and evolution. We are interested in studying a globular cluster formed by a collision between two different GC with NBODY6 (Aarseth, 2003). Firstly, in order to understand this code, we analyse how tidal streams form from a globular cluster in a circular orbit (on the disk) around the center of the Milky Way. In the next stage of this work we will study that collision. The stellar escape or capture from globular cluster can be understood with the Restricted Three Body Problem. These stars escape in a chaotic orbit, and in some cases may return (again in a chaotic orbit) to the cluster due to the Galactic potential. In most cases, such stars quickly alter their escape chaotic orbits to orbits that are similar to the parent cluster's orbit. Our results show an agglomeration of stars in a normal direction related to the direction towards the center of the Milky Way, forming thus a stream. We can explain this considering that a circular orbit around the dominant potential is the most likely orbit, since it requires minimum energy. In this coordinate systems, the tidal tails (or streams) rotates around the cluster center with the same mean motion associated to cluster around the Milky Way center.

[1] Observatório do Valongo, Universidae Federal do Rio de Janeiro, Ladeira Pedro Antonio 43, 20080-090 Rio de Janeiro, Brazil (diogo06@astro.ufrj.br).

SEARCHING FOR CYCLICAL PERIOD VARIATIONS IN CATACLYSMIC VARIABLE STARS

B. W. Borges[1], R. Baptista[2], and A. S. Oliveira[3]

Cataclysmic variables (CVs) are close binary systems where the late-type star (the secondary) overfills its Roche lobe and transfers matter to a white dwarf