# Felipe Gran Curriculum Vitae

2016 Mar. -

2008 Mar. - 2013 Aug.

2013 Mar. - 2013 Aug.

# PERSONAL DETAILS

Full Name Felipe Eduardo Gran Merino

Birthday July 20, 1989 Citizenship Chilean

Mail fgran@astro.puc.cl; fegran@uc.cl

Webpage fegran.github.io

Family status 1 child - born September 4<sup>st</sup> 2012

# **EDUCATION**

PhD in Astrophysics

Pontificia Universidad Católica de Chile

MSc in Astrophysics 2013 Aug. - 2015 Aug.

Pontificia Universidad Católica de Chile

"Distinción máxima"

Licenciatura en Astronomía

Pontificia Universidad Católica de Chile

"Distinción máxima"

# **EXPERIENCES**

Practical

Graduate Thesis

Mapping the outer bulge with RRab stars from the VVV Survey

2015 Mar. - 2015 Aug.

Advisors: Manuela Zoccali (PUC, Chile) and Dante Minniti (UNAB, Chile)

Undergraduate Thesis

Long-Period Variable Stars in the VVV Survey

Advisor: Dante Minniti (PUC) and Roberto Saito (UFS, Brazil)

Summer Practice 2012 Jan.

Commissioning and characterization of the spectrograph at UC Observatory

Advisor: Felipe Barrientos

Assistantships

Data analysis II 2014 Aug. - 2014 Dec.

Teaching assistant

Professor: Manuela Zoccali

Astronomy 2014 Mar.- 2014 Dec.

Scientific assistant at UC Observatory

Professor: Felipe Barrientos

**Experimental Astrophisics** 

2013 Mar. - 2014 Dec.

2015 Apr. - 2015 Jul.

2014 Mar. - 2015 Mar.

Teaching assistant

Professor: Leopoldo Infante

Astronomy 2012 Mar.- 2013 Jul.

Scientific assistant at UC Observatory

Professor: Felipe Barrientos

Astronomy 2013 Mar. - 2013 Jul.

Teaching assistant

Professor: Rolando Dunner

Stellar Astrophysics 2012 Aug.- 2012 Dec.

 $Teaching\ assistant$ 

Professor: Julio Chanamé

Academic grants and other experiences

"CONICYT: Concurso Becas de Doctorado en Chile" 2017 Mar. - 2019 Dec.

Selected for a grant to continue PhD. studies

3D Structure, 3D Kinematics and Chemical Abundances of the Spheroid and Bar in the

Inner Milky Way - Technical Staff

Proyecto FONDECYT Regular 1150345

Advisor: Manuela Zoccali

"CONICYT: Concurso Becas de Magister en Chile" 2014 Mar. - 2015 Jul.
Selected for a grant to continue MSc. studies

Stellar Evolution and Variability Studies in the Era of Large Surveys - Technical Staff

Proyecto FONDECYT Regular 1141141

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Advisor: Márcio Catelan

VVV Templates Project - Technical Staff 2012 Dec. - 2014 Feb.

Proyecto FONDECYT Regular 1110326

Advisor: Márcio Catelan

# **SKILLS**

Languages Spanish (native language)

English

OS UNIX

Programming Language Python

Astronomical software Aladin, IRAF, TOPCAT, STILTS

Text composition LaTeX

Github Repository github.com/fegran

# CONFERENCES AND WORKSHOPS

#### **ESO Star Cluster Meeting**

2017 Mar.

Oral presentation: High-resolution analysis of the globular cluster NGC 6544

Co-I: Manuela Zoccali Santiago, Chile

### Data Driven Modeling of Spectra using The Cannon

2016 Mar

La Serena, Chile

# 6<sup>th</sup> VISTA Variables in the Vía Láctea Science Meeting

2015 Mar.

Oral presentation: Outer bulge RR Lyrae stars in the VVV Survey

Co-I: Dante Minniti and Roberto Saito

Puerto Varas, Chile

#### Second La Serena School for Data Science

2014 Aug.

La Serena, Chile

## Harvard-Chile Special Workshop on Data Science

2014 Jan.

Santiago and La Serena, Chile

# **APPROVED OBSERVING PROGRAMS**

#### OSIRIS at SOAR Observatory

2013 Mar

Follow-up observations of Galactic novae candidates discovered by the VVV Survey
P.I.: Roberto Saito

Co-I: Rodolfo Angeloni, Marcio Catelan, Felipe Gran, Dante Minniti, Tiago Ribeiro

#### VIMOS at Paranal Observatory

2014 Dec

Kinematics and Chemical Abundances of RR Lyrae variables in the Galactic bulge

P.I.: Manuela Zoccali Co-I: incl. **Felipe Gran** 

# **CURRENT WORK AND TOPICS OF INTEREST**

The Milky Way bulge:

Globular clusters, structure and proper motions.

Variable Stars:

RR Lyrae stars.

# **PUBLICATIONS**

Refereed Publications

# FSR 1716: A New Milky Way Globular Cluster Confirmed Using VVV RR Lyrae Stars

Minniti, D. et al. (incl. Gran, F.) 2017, ApJ, 838, 14

### A machine learned classifier for RR Lyrae in the VVV survey

Elorrieta, F. et al. (incl. Gran, F.) 2016, A&A, 595, 82

Discovery of RR Lyrae Stars in the Nuclear Bulge of the Milky Way

Minniti, D, et al. (incl. Gran, F.) 2016, ApJ, 830, 14

Mapping the outer bulge with RRab stars from the VVV Survey

Gran, F., Minniti, D., Saito, R. K., et al.

2016, A&A, 591, 145

# m VVV Survey Observations of a Microlensing Stellar Mass Black Hole Candidate in the Field of the Globular Cluster NGC 6553

Minniti, D. et al. (incl. Gran, F.) 2015, ApJ, 810, 20

#### Clustered Cepheid Variables 90 kiloparsec from the Galactic Center

Chakrabarti, S., Saito, R. K., Quillen A., Gran, F., Klein, C., Blitz, L. 2015, ApJ, 802, 4

### Updated Census of RR Lyrae Stars in the Globular Cluster $\omega$ Centauri

Navarrete, C. et al. (incl. Gran, F.)

2015, A&A 577, A99

#### Bulge RR Lyrae stars in the VVV tile b201

 ${\it Gran, F.}$ ,  ${\it Minniti, D.}$ ;  ${\it Saito, R. K.}$ ;  ${\it Navarrete, C.}$ ;  ${\it D\'ek\'any, I.}$ ;  ${\it McDonald, I.}$ ;  ${\it Contreras Ramos, R.}$ ;  ${\it Catelan, M.}$ 

2015, A&A, 575, 114

### Variable stars in the VVV globular clusters.

#### I. 2MASS-GC02 and Terzan10

Alonso-García, J.; Dékány, I.; Catelan, M.; Contreras Ramos, R.; **Gran, F.**; Amigo, P.; Leyton, P.; Minniti, D. 2015, AJ, 149, 99

#### The VVV Templates Project Towards

an automated classification of VVV light-curves.

I. Building a database of stellar variability in the near-infrared

# A misidentified RR Lyrae variable star in omega Centauri

Navarrete, C.; Catelan, M.; Contreras Ramos, R.; Alonso-Garcia, J.; Dekany, I.; **Gran,** F.; Hempel, M.; Angeloni, R. 2013, IBVS, 6078, 1