

Felipe Gran Curriculum Vitae

PERSONAL DETAILS

Full Name Felipe Eduardo Gran Merino

 $\begin{array}{ccc} Birthday & July \ 20, \ 1989 \\ Citizenship & Chilean \\ RUT & 17.089.167-8 \end{array}$

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Webpage http://fegran.github.io

Family status 1 child - born September 4st 2012

EDUCATION

MSc. in Astrophysics

Pontificia Universidad Católica de Chile

Licenciatura en Astronomía

Pontificia Universidad Católica de Chile "Distinción máxima"

2013 Aug. - 2015 Aug.

2008 Mar. - 2013 Aug.

EXPERIENCES

Practical

Graduate Thesis

2015 Mar. - 2015 Aug.

Mapping the outer bulge with RRab stars from the VVV Survey

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

Undergraduate Thesis

2013 Mar. - 2013 Aug.

Long-Period Variable Stars in the VVV Survey

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

Summer Practice

2012 Inn

Commissioning and characterization of the spectrograph at UC Observatory

Advisor: Felipe Barrientos

Assistantships

Data analysis II

2014 Mar. - 2014 Dec.

 $Course\ assistant$

Professor: Manuela Zoccali

Astronomy

2014 Mar.- 2014 Dec.

Scientific assistant at UC Observatory

Professor: Felipe Barrientos

Experimental Astrophisics

2013 Mar. - 2014 Dec.

 $Course\ assistant$

Professor: Leopoldo Infante

2012 Mar.- 2013 Jul. Astronomy

Scientific assistant at UC Observatory

Professor: Felipe Barrientos

Astronomy 2013 Mar. - 2013 Jul.

Course assistant and corrector Professor: Rolando Dunner

2013 Mar. - 2013 Jul. Physics for Sciences

Course corrector

Professor: Heman Bhuyan

Stellar Astrophysics 2012 Aug.- 2012 Dec.

Course assistant

Professor: Julio Chanamé

2012 Aug. - 2012 Dec. Physics for Sciences

Course corrector

Professor: Juvenal Letelier

Differential Equations 2010 Ago. - 2010 Dec.

Laboratory Assistant

Professor: Mónica Musso

Academic grants and other experiences

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

Ranked 18th of 1732 Chilean students with a score of 4,851/5,000.

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

Proyecto FONDECYT Regular 1141141

Advisor: Márcio Catelan

VVV Templates Project - Technical Staff

Proyecto FONDECYT Regular 1110326

Advisor: Márcio Catelan

2012 Dec. - 2014 Feb.

2014 Mar. - 2015 Mar.

2015 Apr. - 2015 Jul.

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

XII Annual SOCHIAS Meeting

2015 Mar.

Poster: Outer bulge RR Lyrae stars in the VVV Survey

Co-I: Dante Minniti and Roberto Saito

Puerto Varas, Chile

6th 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

Astroinformatics 2014

2014 Aug.

Poster: Outer Bulge RR Lyrae stars in the VVV Survey

Co-I: D. Minniti, R. K. Saito I. Dékány, C. Navarrete, I. McDonald, R. Contreras Ramos and M. Catelan

Viña del Mar, Chile

1st Workshop of the Millennium Institute of Astrophysics

2014 Aug.

Poster: Outer Bulge RR Lyrae stars in the VVV Survey

Co-I: D. Minniti, R. K. Saito I. Dékány, C. Navarrete, I. McDonald, R. Contreras Ramos

and M. Catelan Los Andes, Chile

Second La Serena School for Data Science

2014 Aug.

Participant

La Serena, Chile

5th VISTA Variables in the Vía Láctea Science Meeting

2014 Apr.

Participant

Concón, Chile

Harvard-Chile Special Workshop on Data Science

2014 Inn

Participant

Santiago and La Serena, Chile

4th VISTA Variables in the Vía Láctea Science Meeting

2013 Mar.

Poster: A search for high-amplitude variables in the VVV data

Co-I: Dante Minniti and Roberto Saito Viña del Mar, Chile

4th VISTA Variables in the Vía Láctea Science Meeting

2013 Mar.

Poster: Digitizing IR light curves for VVV Templates Project

Co-I: Márcio Catelan, Rodolfo Angeloni and the VVV Templates team

Viña del Mar, 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

 $2014 \; \mathrm{Dec}$

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

Variable Stars: RR Lyrae and Long-Period variables stars.

The Milky Way bulge: Galactic bulge structure, stellar populations

and proper motions through the VVV Survey.

Computer Science: Astrostatistics and astroinformatics:

Automatic light-curve classification.

PUBLICATIONS

Refereed Publications

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, 810L, 20M

Clustered Cepheid Variables 90 kiloparsec from the Galactic Center

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

Updated Census of RR Lyrae Stars in the Globular Cluster ω Centauri

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

2015, A&A 577, A99

Bulge RR Lyrae stars in the VVV tile b201

Gran, F., Minniti, D.; Saito, R. K.; Navarrete, C.; Dékány, I.; McDonald, I.; Contreras Ramos, R.; 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

Angeloni, R., et al. (incl. Gran, F.) 2014, A&A, 567, 100

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

Non-refereed Publications

Variability Survey of ω Centauri in the Near-IR: P–L Relations

Navarrete, C. et al. (incl. Gran, F.) 2015, IAUGA, 2258379N

Variable Stars in VVV Globular Clusters

Contreras Ramos, R. et al. (incl. Gran, F.) 2015, IAUGA, 2257751C

The VVV Templates Project

Contreras Ramos, R.. et al. (incl. Gran, F.) 2014, RMxAC, 44S, 151C

Near-IR Period-Luminosity Relations for variable stars in ω Centauri

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

2014, RMxAC, 44, 161N

Searches for variability in the Milky Way bulge with the VVV Survey

Saito, R. K. et al. (incl. Gran, F.) 2014, RMxAC, 44, 70S

Stellar variability in the VVV survey: overview and first results

Catelan, M., et al. (incl. Gran, F.) 2014, IAUS, 301, 395

Stellar Variability in the VVV survey

Catelan, M., et al. (incl. Gran, F.)

40 Years of Variable Stars: A Celebration of Contributions by Horace A. Smith (ed. K. Kinemuchi, H. A. Smith, N. De Lee, & C. Kuehn), 2013, arXiv:1310.1996