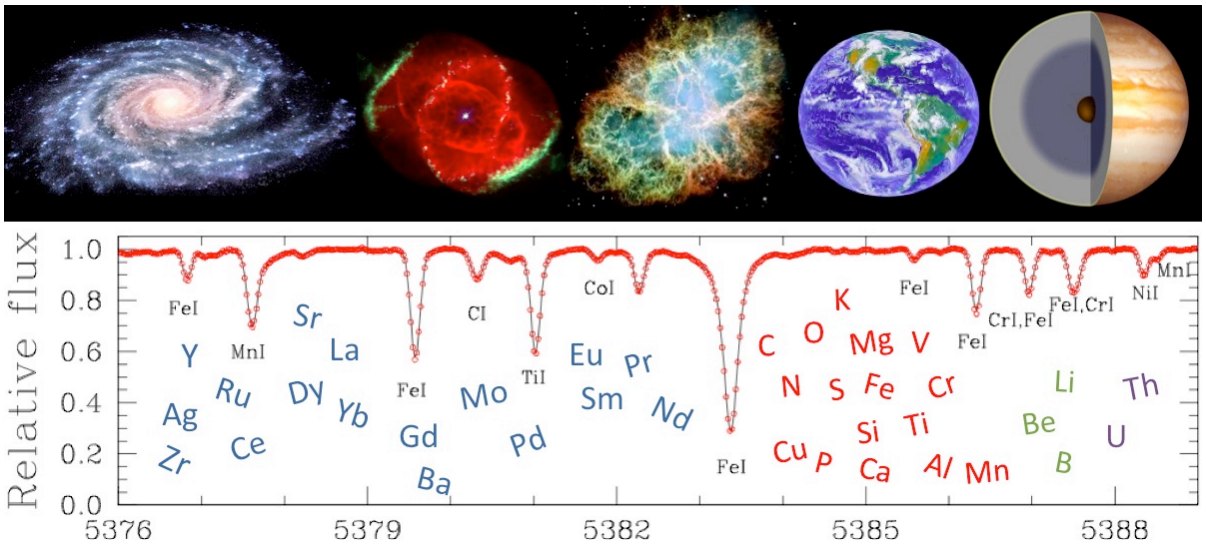
PRECISION SPECTROSCOPY 2016

Stellar Evolution and Nucleosynthesis

Porto Alegre, 19-21 September 2016



SOC: Alan Alves-Brito (UFRGS), Jorge Meléndez (USP), Lorenzo Spina (USP)

LOC: Alan Alves-Brito (UFRGS), Henrique Reggiani (USP)

Venue: Universidade Federal do Rio Grande do Sul (UFRGS), Porto Alegre, Brazil

PROGRAM

Monday to Wednesday, Sept 19 – 21, 2016

- 09:50-10:00 Coffee
- 10:00-12:00: Lectures
- 12:00 – 13:30: Lunch
- 13:30 - 15:30: Lectures
- 15:30 - 16:00: Coffee break
- 16:00 - 17:00 10+2 min talks
- 17:00 - 18:00: Tutorials (closing 17:00 on Wednesday)

Workshop dinner: Sept 20, 2016

Participants

- Adriano Pieres (UFRGS, Brazil)
- Alan Alves-Brito (UFRGS, Brazil)
- Aldo Mura (Concepcion, Chile) *Cancelled registration*
- Alejandra Romero (UFRGS, Brazil)
- Amanda Karakas (Monash, Australia)
- André Milone (INPE, Brazil)
- Anna Barbara Queiroz (UFRGS, Brazil)
- Arthur Alencastro Puls (UFRGS, Brazil)
- Charles J. Bonatto (UFRGS, Brazil)
- Chiaki Kobayashi (Hertfordshire, UK)
- Cintia Fernanda Martinez (ON, Brazil)
- Diego Lorenzo de Oliveira (Valongo, Brazil)
- Diogo Souto (ON, Brazil)
- Fan Liu (Lund, Sweden)
- Geisa Ponte (Valongo, Brazil)
- Henrique Reggiani (USP, Brazil)
- Ingrid Pelisoli (UFRGS, Brazil)
- Jane Jinying Lin (ANU, Australia)
- Jhon Yana Galarza (USP, Brazil)
- Jinmi Yoon (Notre Dame, USA)
- Jorge Melendez (USP, Brazil)
- José-Dias do Nascimento, Jr. (Harvard/USA, UFRN/Brazil)
- Juliana Crestani (UFRGS, Brazil)
- Lia Corazza (INPE, Brazil)
- Lorenzo Spina (USP, Brazil)
- Marcelo Tucci Maia (LNA, Brazil)
- Marilia Carlos (USP, Brazil)
- Marina dal Ponte (UFRGS, Brazil)
- Orlando Santrich (USP, Brazil)
- Ricardo Lopez Valdivia (INAOE, Mexico)
- Riano Escate Giribaldi (Valongo, Brazil)
- Thayse Pacheco (UFRGS, Brazil)

Monday Sept 19, 2016

Lectures

10:00 – 10:10 Opening
10:10 – 11:00 Determination of stellar parameters and chemical abundances (Jorge Melendez)
11:00 – 12:00 Stellar evolution of low and intermediate mass stars (Alejandra Romero)
12:00 – 13:30 Lunch
13:30 – 14:30 Nucleosynthesis prior to the AGB phase (Amanda Karakas)
14:30 – 15:30 Nucleosynthesis of massive stars and supernovae (Chiaki Kobayashi)
15:30 – 16:00 Coffee Break

Talks 16:00 – 17:00 (10 + 2 min each)

- Mass loss in stellar evolution codes LPCODE and MESA (Thayse Adineia Pacheco)
- The chemical compositions of solar twins in the open cluster M67 (Fan Liu)
- Revisiting the 16 Cygni system: new insights using high precision abundances (Marcelo Tucci Maia)
- Stellar Chronometers: Calibrating the Chromospheric Activity in FGKM stars (Diego Lorenzo de Oliveira)
- Li and Rotation of seismic Solar Analogues from Kepler and Hermes (Jose Dias Do Nascimento Jr.)

Tutorial

17:00 – 17:30 Tutorial: chemical abundances with q2 (Henrique Reggiani)
17:30 – 18:00 Tutorial: stellar evolution (Alejandra Romero)

Tuesday Sept 20, 2016

Lectures

10:00 – 11:00 Observations of Galactic Chemical Evolution (Alan Alves Brito)
11:00 – 12:00 Stellar clusters and isochrone fitting (Charles J. Bonatto)
12:00 – 13:30 Lunch
13:30 – 14:30 The evolution and nucleosynthesis of AGB stars (Amanda Karakas)
14:30 – 15:30 Chemical evolution of the Milky Way (Chiaki Kobayashi)
15:30 – 16:00 Coffee Break

Talks 16:00 – 17:00 (10 + 2 min each)

- The transition between Stellar Populations in the Cosmic Chemical Evolution (Lia Camargo Corazza)
- Chemical abundances of a solar-like stars sample (Ricardo López-Valdivia)
- Discovery of barium star candidates in galactic open clusters (Orlando Jose Katime Santrich)
- The s- and r-process in solar twins (Jhon Yana Galarza)
- The nucleosynthetic history of the Galactic disk (Lorenzo Spina)

Tutorial

17:00 – 17:30 Tutorial: running AGB models (Amanda Karakas)
17:30 – 18:00 Tutorial: running Galactic Chemical Evolution (Chiaki Kobayashi)

Wednesday Sept 21, 2016

Lectures

10:00 – 11:00 High precision chemical abundances (Jorge Melendez)
11:00 – 12:00 Cosmic chemical evolution (Chiaki Kobayashi)
12:00 – 13:30 Lunch
13:30 – 14:40 The slow neutron capture process in AGB stars (Amanda Karakas)

Talks 14:40 – 15:30 (10 + 2 min each)

- Differential abundances in metal-poor halo stars (Henrique Reggiani)
- Magnesium isotopic abundance ratios in dwarf stars of the galactic halo (Marília Carlos)
- Evidence for multiple progenitors of the CEMP-no stars (Jinmi Yoon)
- Chemical evolution in the context of GALAH: Method description and preliminary results (Jane Jinying Lin)

15:30 – 16:00 Coffee Break

Talks 16:00 – 17:00 (10 + 2 min each)

- What is the nature of sdA stars? (Ingrid Domingos Pelisoli)
- Recovering Mg and Ca abundances at mid-resolution for an empirical stellar spectral library (Andre de Castro Milone)
- Faint solar analogs for large telescopes (Riano Escate Giribaldi)
- Spectroscopic characterization of planet-hosting Stars (Cintia Fernanda Martinez)
- Stellar abundances of M dwarfs observed by APOGEE spectrograph (Diogo Souto)

Closing 17:00