# Jorge Meléndez

2003 and 2007

• Address: Rua do Matão 1226, São Paulo, 05508-090, SP, Brazil • Phone: 55-11-30912840 • E-Mail: jorge.melendez@iag.usp.br • http://www.astro.iag.usp.br/~jorge/ • Twitter: @DrJorgeMelendez

## Education

Ph.D. in Astronomy, Universidade de São Paulo, Brazil, 2001

MSc. in Astrophysics, Instituto Nacional de Pesquisas Espaciais, Brazil, 1997

BSc. in Physics, Universidad Nacional Mayor de San Marcos, Peru, 1994

## **Current Position**

• Permanent Professor. Univ. São Paulo, Astronomy Department Since 07/2010

## **Previous Positions**

| Research Associate. Universidade de Porto                     | 02/2008 - 06/2010 |
|---|-------------------|
| Research Fellow. The Australian National University, RSAA     | 09/2005 - 01/2008 |
| Postdoctoral Scholar. Caltech, Astronomy Department           | 09/2003 - 08/2005 |
| • Visiting Researcher. Univ. São Paulo, Astronomy Department  | 12/2002 - 03/2003 |
| • Visiting Lecturer. Universidad Nacional Mayor de San Marcos | 09/2002 - 08/2003 |
| • Postdoc. Univ. São Paulo, Astronomy Department              | 04/2001 - 03/2002 |

#### Awards/Honors

| • Included in the list of the most influential scientists, based on careerlong impact (until 2019), PLoS Biol 18(10): e3000918   | 2020  |
|--|---|
| • Prize for supervising the best PhD in Astronomy at IAG/USP in 2019, student Henrique Reggiani, and best MSc in Astronomy at IAG/USP in 2017, student Leonardo dos Santos | 2020<br>2018                                  |
| <ul> <li>Honorable mention for supervising the PhD of Marcelo Tucci Maia,<br/>Awards 'Tese Destaque USP 2018' &amp; 'CAPES 2017'</li> </ul>                                | 2018, 2017                                    |
| • Nominated for "Make a Difference" prize, to acknowledge Brazilian researchers that inspired Brazil and the world in 2016   | 2016  |
| • Best Astronomy Undergraduate Research at IAG/USP: my students<br>Lucas Schirbel (2014) and Gabriela C. Silva (2019)  | 2014, 2019                                    |
| • CNPq productivity fellowship, level 1, awarded to the most productive scientists in Brazil   | 3/2020 – present<br>3/2011 – 2/2020 (level 2) |

## **Research Experience**

• Physical Properties of Stars. Magnetic Stellar Activity. Chemical Abundances. Stellar Spectroscopy. Exoplanets. Galactic Archaeology. Observational Astronomy (ESO, Magellan, Gemini, Keck, Subaru, Kitt Peak, Palomar, Siding Spring, OPD)

• Research Merit Award, Univ. Nacional Mayor de San Marcos

• Over 300 observing nights allocated in different observing facilities; more than half of them as PI, including 100 nights for a HARPS Large Program to seek planets around solar twins

## **Publications**

• 143 refereed publications (lead author on 28). Over 8800 citations, h-index: 53, m-index: 2.5

# Student supervision and mentoring

• 6 postdoctoral scholars, 5 PhD, 5 MSc, 19 undergrads

# **Teaching Experience**

- Graduate: Observational Astrophysics (2011 to 2013, 2016 to 2018)
- Undergraduate: Stellar Astrophysics (2017, 2018, 2019, 2020, 2021), Astronomy Outreach (2014, 2015, 2018, 2019), Observational Methods in Astrophysics (2014), Astronomy for Meteorology (2010-2013)

#### **Selected Achievements**

- First homogeneous chemical abundance analysis of disk, halo and bulge stars in the Milky Way
- First analysis achieving a precision of 0.01 dex, discovering likely signatures of planets in the chemical composition of stars, abundance variations in open clusters, and chemical clocks
- Survey of bright metal-poor stars, discovering the brightest ultra metal-poor ([Fe/H] < -4) star
- Survey of planets around solar twins: discovery of Jupiter twin, super-Earth and super-Neptune
- The Sun as a star: evolution of the Sun studied through solar twins

## **Talks**

• More than 150 talks at conferences, colloquia, advanced schools and outreach events

## **Committee Service**

- Organizer of the Workshops "Precision Spectroscopy" in 2015, 2016, 2017, 2018, 2019, 2021
- Time allocation committees in Australia and Brazil
- Portuguese representative for the ESO users committee (2009 2010)
- Referee for papers in astronomical journals. External advisor for grants and observing proposals

## **Outreach**

- Research featured in several press releases in Australia, Brazil, USA and Germany
- Hundreds of research highlights at national and international media, including Nature News, Discovery News, Cosmos, Universe Today, New Scientist, Sky & Telescope, Astronomy
- Regularly speaks to journalists about his own research and also to comment major discoveries
- Public talks in Brazil, Sweden, Peru, Portugal and Australia.
- Developed and offered first Science Outreach course at Univ. São Paulo, Brazil.
- Twitter: @DrJorgeMelendez (> 9600 followers with over 600 000 impressions/month) and outreach account @AstroUSP (> 26000 followers with over 1,5 million impressions/month)

## Languages

• English (fluent), Spanish (fluent), Portuguese (fluent)