

Claudio Melo

European Southern Observatory ■ Av. Alonso de Cordova, 3107, Santiago, Chile ■ +5622463 3032 ■ cmelo@eso.org

ESO Representative in Chile

Personal Data

Name: Claudio Henrique de Figueiredo Melo ([LinkedIn](#), [html](#))

Date of birth: October 12, 1973

Nationality: Brazilian

Married to Lucivanda Lima de Freitas, 2 children (13 and 10 year-old)

Education

Geneva Observatory (Geneva University), Geneva, Switzerland

PhD (Astrophysics), 2001, Binarity among T-Tauri stars

Advisor: Prof. Michel Mayor

Federal University of Rio Grande do Norte (UFRN), Natal, Brazil

M.Sc. (Astrophysics), 1996, Heating processes in the upper atmosphere of evolved giant stars

Advisor: Prof. Jose Renan de Medeiros

Federal University of Rio Grande do Norte (UFRN), Natal, Brazil

B.Sc. (Physics), 1991-1994

Current Position

ESO Representative in Chile (Associate Astronomer) since 2018

European Southern Observatory, ESO/Chile

As ESO Representative in Chile I have the following main responsibilities and roles:

- Champion the collaborative roots upon which ESO stands.
 - Institutionally represent ESO and its Director General in Chile.
 - Work with ESO management and a broad spectrum of stakeholders in Chile and in the Member-States to identify challenges, needs and solutions necessary for the long-term operations of ESO's current and future programmes in Chile.
 - Portfolio of projects and matters managed or with strong involvement of Representation:
 - Collaboration with UN Women to promote STEM careers in Chile and increase diversity in the ESO workforce
 - Development and implementation of Stakeholder Engagement Strategy fostering educational and professional training opportunities in science and engineering in Chile.
 - Management of cooperation agreements, including administration and distribution of funds
 - Assisting the La Silla Paranal Observatory Director and its management in defining strategies and partnerships necessary for the Paranal Observatory digital transformation
-

Recent Work History (main roles and highlights)

Head of the Office for Science (Associate Astronomer), 2013 to 2018

European Southern Observatory, ESO/Chile

- Maintain a lively and scientific enriching environment
- Administration of the science programs and the associated budget (500kEUR/year, c.a.)
- Evaluate the scientific performance of all ESO Chile Faculty astronomers, fellows and students
- Offer coaching and guidance to students, fellows and junior staff astronomers
- Representing ESO in different instances such as: technical and scientific committees, scientific events, interacting with the press.

Operations Staff Astronomer (Associate Astronomer), 2010 to 2013

European Southern Observatory, Paranal Observatory, ESO/Chile

- Deputy of the Instrument Operations Team Coordinator (IOTC)
 - Responsible for the design, definition and implementation of the Project Philosophy and Methodology allowing staff members to propose and carry out personal projects to improve operations, exercise their creativity and gain ownership of the Observatory
- HARPS Instrument Scientist
- FLAMES Instrument Scientist
 - Successful GIRAFFE intervention to recover grating efficiency
- Member of General Operations Team

User Support Staff Astronomer (Associate Astronomer), 2008 to 2010

European Southern Observatory, User Support Department, ESO/Germany

- FLAMES and UVES main support astronomer
 - Design and implementation of the wiki-based knowledge database of solutions and best practices
 - Chair of the ESO WS "Six Years of FLAMES operations" to review scientific results and improvements of FLAMES, Garching Dec. 2008

Leadership and Management skills

Inspired by the work of Stephen Covey, great masters such as Mas Oyama and Gichin Funakoshi and the Zen popular literature, I have tried to exercise two main ideas in my doings: i) a servant leadership where my actions are emphatic and kind in nature and aimed to empower and give voice to those around me unleashing their potential to the mutual benefit of the Organization and the people working on it; and ii) strive to demonstrate initiative in all things, never fearing action. Below, four examples of servant leadership and continued effort are given:

- *Development and execution* of a Stakeholder Engagement Strategy and the associated communication plan with the goal of generate mutual benefit to ESO and the Chilean society and generate the conditions to the long-term operability of ESO in the country.
- *Assisting* the La Silla Paranal Observatory Director and its management in defining strategies and partnerships necessary for the Paranal Observatory digital transformation, including the development and

incorporation of Industry4.0 capabilities into operations and building the future observatory workforce needed at the ELT era.

- From mid 2018- 2019, I chaired of the Steering Group of the [La Silla Total Solar Eclipse 2019](#) event. The La Silla TSE was a massive event bringing 1000 visitors to La Silla including the Chilean President and the First Lady, Ministers, Ambassadors, school kids from across the country, tourists from all over the world. The TSE turned out to be a very successful event marking ESO's history. The TSE was made possible thanks to a high degree of coordination, cooperation and hardiness from all staff involved.
- From 2013 until 2017, I worked close to wide spectrum of stakeholders to promote the Brazilian ratification to the ESO membership. A considerable amount of energy was put in interfacing with the Brazilian astronomical community, society in general, the Brazilian government and the ESO upper management.

As ESO Representative in Chile, I am thrilled to use the wonders of the Universe and the educational potential of Astronomy to inspire the youth across the world and specially in Chile. I truly believe in the virtuous circle that science creates in society and in the collaborative roots upon which ESO stands. Along with the ESO staff in Chile, we take care of nurturing the already very good relations with the Government Officials, the vibrant scientific community in Chile - our Host State - and in the ESO sixteen member states and our Strategic Partner - Australia.

Continuous education & managerial training

- [From Corporate Social Responsibility to Corporate Social Innovation](#), BabsonX on edX
- [Deep Learning specialization](#) (5 courses, 4 completed, 1 pending), *deeplearning.ai* on Coursera
- ESO Management continuous training:
 - **Remote Leadership**, Marsh, *Zoom platform*, March 31, 2020
 - **Conflict Management**, *ESO Ombuds*, ESO Chile, July 29, 2019
 - **Unconscious bias and Mitigation**, *NeuroLeadership Institute*, Best Western Premier Marina Las Condes, May 23, 2019
 - **Accountability**, *Enaccion consulting*, ESO Chile, October 23, 2018
 - **Collaboration**, *Enaccion consulting*, ESO Chile, September 4, 2018
 - **Value of Commitment**, *Enaccion consulting*, ESO Chile, August 14, 2018
 - **Critical Conversations**, *Enaccion consulting*, ESO Chile, August 7-8, 2018
 - **Project Management**, *Tiba*, ESO Garching, February 25-27, 2009.

Science Services

ESO Internal Committees:

- ESO Diversity and Inclusion Committee
- Scientific Personal Committee (evaluation of faculty astronomers)
- ESO Fellowship and Studentship Selection Committee
- Member of many selection boards for ISM and Local Staff
- ESO-Chile committee (discussion between ESO and the Chilean astronomical community about astronomical matters)
- Joint Committee of ESO and Government of Chile (discussion between ESO and the Chilean Government)

Other services:

- Present – Ad hoc consultant to FAPESP (Fundacao de Amparo a Pesquisa do Estado de Sao Paulo)
- Present – CONICYT (Chile) referee
- ELT/HIRES Phase A Review Board member (Science and Operations), December 2017, ESO Garching
- 2014-2017 Co-PI of the Near Infra-Red Planet Searcher ([NIRPS](#))
- 2014-2015 Board member of PhD::SPACE (FCT, Portugal)
- 2014 - Galactic panel member of CNTAC (Chilean Time Allocation Committee, Chile)
- 2009-2014 – External consultant for the ERC-starting grant 2009 EXtra-solar planets and stellar astrophysics: towards the detection of Other Earths (PI Nuno Santos)
- ESPRESSO (**Echelle SPectrograph for Rocky Exoplanet and Stable Spectroscopic Observations**) Final Design Review Board member, May 2013, ESO-Garching
- 2010-2012 - Deputy Chair of the ESO Astronomical Faculty
- Australian Astronomical Observatory (AAO) Distinguished Visitor (November 2011)
- Member of jury of a number of Ph.D. and M.Sc. thesis
- 2007 – External advisor/evaluator on the reformulation of the Astronomy program for the 3rd grade of the Chilean Public School.

Conferences:

- Co-chair of the Second ESO/NEON La Silla Observing School, Santiago and La Silla, February 2018
- Co-chair of the [ESO/NEON La Silla Observing School](#), Santiago and La Silla, February 2016
- Co-chair of the [ESO Brazil Industry Day](#), Sao Paulo, November 2015
- Co-chair of ESO conference “[Astrobiology and Planetary Atmospheres](#)”, Santiago, October 2015
- SOC of Exoplanets ELT WS, Garching, Feb/2014
- Co-chair of ESO/UFRN conference “[400 years of stellar rotation](#)”, Natal, November 2013
- Co-chair of ESO conference “[Towards other Earths: perspectives and limitations in the ELT era](#)”, Porto, October, 2009
- Co-chair ESO informal WS “[Six Years of FLAMES operations](#)”, Garching Dec. 2008
- 2008-2009 Member of the Programme Committee of the [Alpbach Summer School 2009](#) (sponsored by FFG/Austria & ESA) on “Exoplanets: Discovering and characterizing Earth type planets”
- Co-chair of the ESO conference “Star Formation Across the Milky Way”, Santiago de Chile, March 2008

Science talks & colloquia

Last 5 years

- [Chile & ESO : A lifetime friendship](#), The La Silla Observatory - from the inauguration to the future, Chile, March 2019
- **ESO facilities for Solar System and exoplanet exploration**, Diversis mundi, Chile, March 2018
- **Atmospheric characterization of exoplanets through their reflected light**, IAU F3 Research Meeting on Astrobiology, Coyhaique, Chile, December 2017
- **Exploring new worlds with ESO telescopes**, 1st Argentinian Workshop on Exoplanets “Observations and data analysis”, Buenos Aires, Argentina, October 2017
- **The SACY view of the SCO-CEN complex**, IAU-LARIM, Florianopolis, Brazil, November 2013
- **Rotation and disk evolution in the SACY associations**, Invited talk at 400 years of stellar rotation, Natal, Brazil, September 2013

- **From 1492 to 2010: A never ending exploration**, Invited talk at INCAI, Santiago, Chile, August 2013
- **Oh My God, it's full of (young) stars**, Colloquium at PUC, Santiago, Chile, June 2013

Science Communication & Outreach

Last 5 years

Recent outreach talks:

- **Panel Discussion on Future Observatories**, Puerto de Ideas Science Festival, Antofagasta, 2019
- **La astronomía nuestra de cada día**, Serie de Charlas Publicas de la UA, Antofagasta, June 2018
- **Buscando vida mas allá de nuestro sistema solar**, Public discussion during the 1st Argentinian Workshop on Exoplanets, Buenos Aires, Argentina, October 2017
- **ESO en Chile**, XX Congreso Internacional de Astronomia Amateur, Procuero, Chile, October 2017
- **The dawn of man and life out there**, 10th IMAA, April 2017, Campos, Brazil
- **Reflection about space and time**, FIIS, November 2016, Santiago, Chile
- **La Astronomia como catalizador de la innovación y cooperación en América Latina**, CILAC Forum, Montevideo, Uruguay, September 2017
- **The Virtuous Circle of Astronomy**, 8th IMAA, April 2015, Campos, Brazil
- [The Virtuous Circle of Astronomy](#), 1st SIAGE, August 2015, Vitoria, Brazil
- **Science at ESO**, ESO Brazil Industry Day, November 2015, Sao Paulo, Brazil

Many interviews to TV shows, newspapers, magazines. A sample shown below:

- [Megatelescopio "ELT" se construye en Chile](#), CNN Chile, May 2017
- [Começa no Chile a construção do maior telescópio já projetado](#), Estado de SP, May 2017
- [América do Sul Sobre Rodas: Atacama](#), TV Globo, September 2016
- [The Dome and main-structure of the E-ELT](#), National TV Chile, May 2016
- [O Futuro da astronomia brasileira](#), Estado de SP, June 2016
- [Visões do Universo, Matéria de Capa](#), TV Cultura, February 2016
- [Entenda por que a adesão bilionária ao ESO é um ótimo negócio para o Brasil](#), Revista Galileu, March 2015
- [Astrónomos logran nueva técnica para detectar exoplanetas](#), La Tercera, April 2015
- [Visitamos as obras do European Extremely Large Telescope - o maior telescópio já projetado](#), Revista Galileu, February 2015
- [Al infinito y más allá](#), La Tercera, August 2014
- [Así será el gran ojo del mundo](#), August 2014
- [15th Anniversary of the VLT](#), Ultimas Noticias, May 2013
- [Oldest Solar Twin](#), TV Globo and USP press-conference (ESO representative), August 2013
<http://www.space.com/22518-astronomers-major-result-star-discovery.html>
- [Brasil esta em projeto de super telescópio](#), Tribuna do Norte, November 2013
- [Brasil tem papel-chave na construção do maior olho da humanidade](#), Portal Terra, November 2013

Press-releases:

- [Unexpected Excess of Giant Planets in Star Cluster](#), ESO PR, June 2016
- [First Detection of Reflected Visible Light from 51 Pegasi b](#), ESO PR, April 2015
see also Physics World [Highlights](#)

Teaching and Supervision

Last 5 years

- Co-advisor of the Ph.D studies of Mr. Jason Neil (IA-Porto, Portugal). **Defended July/2019**

- Co-advisor of the Ph.D studies of Mr. Jorge Martins (ESO/IA-Porto, Portugal). **Defended July/2018**
- Co-advisor of the Ph.D. studies of Mr. Paul Elliott (ESO/Exeter, UK). **Defended May/2016**
- Co-advisor of the Ph.D. studies of Mr. Matias Jones (ESO/U. of Chile, Chile). **Defended Feb/2013**
- Co-advisor of the Ph.D studies of Mr. Pedro Almeida (ESO/CAUP, Porto, Portugal). **Defended Sep/2012**
- 3 lectures on the ESO/NEON La Silla Observing School, February 2016
- Training to ESO fellows/students on *Should We Invest Time into Time Management*, May 2016
- Training to ESO fellows/students on *Wanna find your job? Find yourself first*, Sep 2014 & June 2016
- Training to Paranal Telescope Operators on *The Scientific Process: from the idea to publication*, Feb 2016
- Training to ESO fellows/students on *how to prepare a good proposal*, July 2014 and Sep 2015
- Coordinator of lecture series Topics in Astrophysics (ESO/PUC, 2013)
- ESO training session to the Brazilian community (one session 2011 and three sessions in 2013)

L a n g u a g e s

- Portuguese (mother tongue)
- English, French and Spanish (fluent reading, writing, speaking)

Main Research & Publication Record

Melo has authored **119 refereed papers** in international peer-reviewed journals – 19 papers as first- or senior-author, 16 as 2nd or 3rd-author, and 78+ in collaborative effort - with a total number of citations of 4697 (August 2020, NASA ADS).

After almost 20 years of an extraordinary development, the field of extrasolar planets is heading to revolutionize mankind by answering one of the most enduring questions we have ever asked: are we alone in the universe? Finding earth-mass planets in the habitable zone of low-mass stars and probing whether or not they might present signals of biologic activity is a daunting task requiring a myriad of state-of-the-art facilities and instruments on space and on the ground covering a large range of wavelengths. Novel analysis methods are also a must, but, first and foremost, human perseverance. I am proud to be an active contributor of this collective effort to find and characterize habitable worlds where life could emerge. My current projects are done in strong collaboration with the Institute for Astrophysics and Space Sciences in Portugal and the [Near InfraRed Planet Searcher \(NIRPS\)](#) consortium of which I am an *ad-hoc* senior member of the Science Team.

Publication List

First- and senior-author¹ papers

1. *Recovering the colour-dependent albedo of exoplanets with high-resolution spectroscopy: from ESPRESSO to the ELT*, Martins J. H. C., Figueira P., Santos N. C., **Melo C.**, Garcia Muñoz A., Faria J., Pepe F., Lovis C., MNRAS 2018, 478, 5240
2. *Search for associations containing young stars (SACY). VII. New stellar and substellar candidate members in the young associations*, Elliott P., Bayo A., **Melo C. H. F.**, Torres C. A. O., Sterzik M. F., Quast G. R., Montes D., Brahm R., A&A 2016, A13
3. *Search for associations containing young stars (SACY). VI. Is multiplicity universal? Stellar multiplicity in the range 3-1000 au from adaptive-optics observations*, Elliott P., Huélamo N., Bouy H., Bayo A., **Melo C. H. F.**, Torres C. A. O., Sterzik M. F., Quast G. R., Chauvin G., Barrado D., A&A 2015, A88
4. *Search for associations containing young stars (SACY). V. Is multiplicity universal? Tight multiple systems*, Elliott P., Bayo A., **Melo C. H. F.**, Torres C. A. O., Sterzik M., Quast G. R., A&A 2014, A26
5. *Search for associations containing young stars: chemical tagging IC 2391 and the Argus association*, De Silva G. M., D’Orazi V., **Melo C.**, Torres C. A. O., Gieles M., Quast G. R., Sterzik M., MNRAS 2013, 1005
6. *Finding proto-spectroscopic binaries. Precise multi-epoch radial velocities of seven protostars in rho-Ophiuchus*, Viana Almeida P., **Melo C.**, Santos N. C., Figueira P., Sterzik M., Gameiro J. F., A&A 2012, A62
7. *Study of the impact of the post-MS evolution of the host star on the orbits of close-in planets. I. Sample definition and physical properties*, Jones M. I., Jenkins J. S., Rojo P., **Melo C. H. F.**, A&A 2011, A71
8. *Radial velocities with CRIRES. Pushing precision down to 5-10 m/s*, Figueira P., Pepe F., **Melo C. H. F.**, Santos N. C., Lovis C., Mayor M., Queloz D., Smette A., Udry S., A&A 2010, A55
9. *Evidence of early disk-locking among low-mass members of the Orion Nebula Cluster*, Biazzo K., **Melo C. H. F.**, Pasquini L., Randich S., Bouvier J., Delfosse X., A&A 2009, 1301
10. *Search for associations containing young stars (SACY). III. Ages and Li abundances*, da Silva L., Torres C. A. O., de La Reza R., Quast G. R., **Melo C. H. F.**, Sterzik M. F., A&A 2009, 833

¹ Having a student or post-doc under my (co-)supervision as first-author or projects where my leadership was essential to the publication.

11. *Search for associations containing young stars (SACY). II. Chemical abundances of stars in 11 young associations in the solar neighborhood*, Viana Almeida P., Santos N. C., **Melo C.**, Ammler-von Eiff M., Torres C. A. O., Quast G. R., Gameiro J. F., Sterzik M., *A&A* 2009, 965
12. *Search for associations containing young stars (SACY). I. Sample and searching method*, Torres C. A. O., Quast G. R., da Silva L., de La Reza R., **Melo C. H. F.**, Sterzik M., *A&A* 2006, 695
13. *A new Neptune-mass planet orbiting HD 219828*, **Melo C.**, et al., *A&A* 2007, 721
14. *On the age of stars harboring transiting planets*, **Melo C.**, Santos N. C., Pont F., Guillot T., Israelian G., Mayor M., Queloz D., Udry S., *A&A* 2006, 251
15. *On the nature of lithium-rich giant stars. Constraints from beryllium abundances*, **Melo C. H. F.**, de Laverny P., Santos N. C., Israelian G., Randich S., Do Nascimento J. D., Jr., de Medeiros J. R., *A&A* 2005, 227
16. *The short period multiplicity among T Tauri stars*, **Melo C. H. F.**, *A&A* 2003, 269
17. *On the pre-main sequence circularization period*, **Melo C. H. F.**, Covino E., Alcalá J. M., Torres G., *A&A* 2001, 898
18. *Accurate $V \sin i$ measurements in M 67: The angular momentum evolution of 1.2 Msun stars*, **Melo C. H. F.**, Pasquini L., De Medeiros J. R., *A&A* 2001, 851
19. *On the link between coronal activity and orbital period in evolved binary stars.*, **Melo C. H. F.**, de Medeiros J. R., *A&A* 1996, 797

Second- and third-author papers

1. *First determination of s-process element abundances in pre-main sequence clusters. Y, Zr, La, and Ce in IC 2391, the Argus association, and IC 2602*, D'Orazi V., De Silva G. M., **Melo C. H. F.**, *A&A* 2017, **598**, A86
2. *An extensive radial velocity survey towards NGC 6253*, Montalto M., **Melo C. H. F.**, Santos N. C., Queloz D., Piotto G., Desidera S., Bedin L. R., Momany Y., Saviane I., *MNRAS* 2016, 2722
3. *The Effects of Differential Reddening and Stellar Rotation on the Appearance of Multiple Populations in Star Clusters: The Case of Trumpler 20*, Platais I., **Melo C.**, Quinn S. N., Clem J. L., de Mink S. E., Dotter A., Kozhurina-Platais V., Latham D. W., Bellini A., *ApJ* 2012, L8
4. *Gravitational redshifts in main-sequence and giant stars*, Pasquini L., **Melo C.**, Chavero C., Dravins D., Ludwig H.-G., Bonifacio P., de La Reza R., *A&A* 2011, A127
5. *Trumpler 20 - an old and rich open cluster*, Platais I., **Melo C.**, Fulbright J. P., Kozhurina-Platais V., Figueira P., Barnes S. A., Méndez R. A., *MNRAS* 2008, 1482
6. *Rotational velocities of the giants in symbiotic stars - II. Are S-type symbiotics synchronized?*, Zamanov R. K., Bode M. F., **Melo C. H. F.**, Bachev R., Gomboc A., Stateva I. K., Porter J. M., Pritchard J., *MNRAS* 2007, 1053
7. *WIYN open cluster study. XXVI. Improved kinematic membership and spectroscopy of IC 2391*, Platais I., **Melo C.**, Mermilliod J.-C., Kozhurina-Platais V., Fulbright J. P., Mendez R. A., Altmann M., Sperauskas J., *A&A* 2007, 509
8. *Fundamental properties of pre-main sequence stars in young, southern star forming regions: metallicities*, James D. J., **Melo C.**, Santos N. C., Bouvier J., *A&A* 2006, 971
9. *Doppler follow-up of OGLE planetary transit candidates in Carina*, Pont F., Bouchy F., **Melo C.**, Santos N. C., Mayor M., Queloz D., Udry S., *A&A* 2005, 1123
10. *HD 34700 is a T Tauri multiple system*, Sterzik M. F., **Melo C. H. F.**, Tokovinin A. A., van der Bliik N., *A&A* 2005, 671
11. *A planet-sized transiting star around OGLE-TR-122. Accurate mass and radius near the hydrogen-burning limit*, Pont F., **Melo C. H. F.**, Bouchy F., Udry S., Queloz D., Mayor M., Santos N. C., *A&A* 2005, L21

12. *Doppler follow-up of OGLE transiting companions in the Galactic bulge*, Bouchy F., Pont F., **Melo C.**, Santos N. C., Mayor M., Queloz D., Udry S., *A&A* 2005, 1105
13. *The pre-main sequence spectroscopic binary AK Scorpii revisited*, Alencar S. H. P., **Melo C. H. F.**, Dullemond C. P., Andersen J., Batalha C., Vaz L. P. R., Mathieu R. D., *A&A* 2003, 1037
14. *New low-mass pre-main sequence spectroscopic binaries in Orion*, Covino E., **Melo C.**, Alcalá J. M., Torres G., Fernández M., Frasca A., Paladino R., *A&A* 2001, 130
15. *A study of Li-rich stars discovered by ROSAT in Taurus-Auriga*, Wichmann R., Torres G., **Melo C. H. F.**, Frink S., Allain S., Bouvier J., Krautter J., Covino E., Neuhauser R., *A&A* 2000, 181
16. *Rotational velocity for lithium-rich evolved stars.*, de Medeiros J. R., **Melo C. H. F.**, Mayor M., *A&A* 1996, 465

Other papers in collaborative work

Last 10 years

1. *A Pair of TESS Planets Spanning the Radius Valley around the Nearby Mid-M Dwarf LTT 3780*, Cloutier, Ryan et al., *AJ* 2020, **160**, 3
2. *Hot Exoplanet Atmospheres Resolved with Transit Spectroscopy (HEARTS). III. Atmospheric structure of the misaligned ultra-hot Jupiter WASP-121b*, Bourrier, V. et al., *A&A* 2020, **635**, A205
3. *Hot Exoplanet Atmospheres Resolved with Transit Spectroscopy (HEARTS). II. A broadened sodium feature on the ultra-hot giant WASP-76b.*, Seidel, J.V et al., *A&A* 2019, **623**, A166
4. *Incidence of planet candidates in open clusters and a planet confirmation.*, Leão, I. C., et al., 2018, *A&A* **620**, A139
5. *Precise masses for the transiting planetary system HD 106315 with HARPS*, Barros, S. et al., *A&A* 2017, **608**, 25
6. *Search for giant planets in M 67. IV. Survey results*, Brucalassi A., Koppenhoefer J., Saglia R., Pasquini L., Ruiz M. T., Bonifacio P., Bedin L. R., Libralato M., Biazzo K., **Melo C.**, Lovis C., Randich S., *A&A* 2017, **603**, A85
7. *An eccentric companion at the edge of the brown dwarf desert orbiting the 2.4 Msun giant star HIP 67537*, Jones M. I., Brahm R., Wittenmyer R. A., Drass H., Jenkins J. S., **Melo C. H. F.**, Vos J., Rojo P., *A&A* 2017, **602**, A58
8. *Hot Exoplanet Atmospheres Resolved with Transit Spectroscopy (HEARTS). I. Detection of hot neutral sodium at high altitudes on WASP-49b*, Wyttenbach A., et al., *A&A* 2017, **602**, A36
9. *Evidence of a substellar companion around a very young T Tauri star*, Almeida P. V., Gameiro J. F., Petrov P. P., **Melo C.**, Santos N. C., Figueira P., Alencar S. H. P., *A&A* 2017, **600**, A84
10. *New spectroscopic binary companions of giant stars and updated metallicity distribution for binary systems*, Bluhm P., et al., *A&A* 2016, **593**, A133
11. *Search for giant planets in M67. III. Excess of hot Jupiters in dense open clusters*, Brucalassi A., et al., *A&A* 2016, L1
12. *An extreme planetary system around HD 219828. One long-period super Jupiter to a hot-Neptune host star*, Santos N. C., et al., *A&A* 2016, A13
13. *Fundamental stellar parameters for selected T-Tauri stars in the Chamaeleon and Rho Ophiuchus star-forming regions*, James D. J., Aarnio A. N., Richert A. J. W., Cargile P. A., Santos N. C., **Melo C. H. F.**, Bouvier J., *MNRAS* 2016, 1363
14. *Four new planets around giant stars and the mass-metallicity correlation of planet-hosting stars*, Jones M. I., et al., *A&A* 2016, A38
15. *Physical parameters and long-term photometric variability of V1481 Ori, an SB2 member of Orion nebula Cluster with an accreting component*, Messina S., Parihar P., Biazzo K., Lanza A. F., Distefano E., **Melo C. H. F.**, Bradstreet D. H., Herbst W., *MNRAS* 2016, 3372

16. *The HARPS search for southern extra-solar planets. XL. Searching for Neptunes around metal-poor stars*, Faria J. P., et al., A&A 2016, A25
17. *Reflected Light from Giant Planets in Habitable Zones: Tapping into the Power of the Cross-Correlation Function*, Martins J. H. C., Santos N. C., Figueira P., **Melo C.**, OLEB 2016,
18. *Radial velocity information content of M dwarf spectra in the near-infrared*, Figueira P., Adibekyan V. Z., Oshagh M., Neal J. J., Rojas-Ayala B., Lovis C., **Melo C.**, Pepe F., Santos N. C., Tsantaki M., A&A 2016, A101
19. *The HARPS search for southern extra-solar planets. XXXIX. HD 175607, the most metal-poor G dwarf with an orbiting sub-Neptune*, Mortier A., et al., A&A 2016, A135
20. *Detecting ring systems around exoplanets using high resolution spectroscopy: the case of 51 Pegasi b*, Santos N. C., et al., A&A 2015, A50
21. *Giant planets around two intermediate-mass evolved stars and confirmation of the planetary nature of HIP 67851c*, Jones M. I., Jenkins J. S., Rojo P., Olivares F., **Melo C. H. F.**, A&A 2015, A14
22. *WISE J061213.85-303612.5: a new T-dwarf binary candidate*, Huelamo N., et al., A&A 2015, A1
23. *Evidence for a spectroscopic direct detection of reflected light from 51 Pegasi b*, Martins J. H. C., et al., A&A 2015, A134
24. *The VLT/NaCo large program to probe the occurrence of exoplanets and brown dwarfs in wide orbits. I. Sample definition and characterization*, Desidera S., et al., A&A 2015, A126
25. *A planetary system and a highly eccentric brown dwarf around the giant stars HIP 67851 and HIP 97233*, Jones M. I., Jenkins J. S., Rojo P., **Melo C. H. F.**, Bluhm P., A&A 2015, A3
26. *Evidence from stellar rotation of enhanced disc dispersal. I. The case of the triple visual system BD-21 1074 in the beta Pictoris association*, Messina S., Monard B., Biazzo K., **Melo C. H. F.**, Frasca A., A&A 2014, A19
27. *The properties of planets around giant stars*, Jones M. I., Jenkins J. S., Bluhm P., Rojo P., **Melo C. H. F.**, A&A 2014, A113
28. *The HARPS search for southern extra-solar planets. XXXV. The interesting case of HD 41248: stellar activity, no planets?*, Santos N. C., et al., A&A 2014, A35
29. *Early-type stars observed in the ESO UVES Paranal Observatory Project - IV. Studies of CN, CH+ and CH in the interstellar medium*, Smoker J., Ledoux C., Jehin E., Keenan F. P., Kennedy M., Cabanac R., **Melo C.**, MNRAS 2014, 1127
30. *Three planetary companions around M 67 stars*, Brucalassi A., Pasquini L., Saglia R., Ruiz M. T., Bonifacio P., Bedin L. R., Biazzo K., **Melo C.**, Lovis C., Randich S., A&A 2014, L9
31. *Study of the impact of the post-MS evolution of the host star on the orbits of close-in planets. II. A giant planet in a close-in orbit around the RGB star HIP 63242*, Jones M. I., Jenkins J. S., Rojo P., **Melo C. H. F.**, Bluhm P., A&A 2013, A78
32. *Overview of semi-sinusoidal stellar variability with the CoRoT satellite*, De Medeiros J. R., et al., A&A 2013, A63
33. *Characterization of the nearby L/T Binary Brown Dwarf WISE J104915.57-531906.1 at 2 Pc from the Sun*, Kniazev A. Y., et al., ApJ 2013, 124
34. *Spectroscopy of very low-mass stars and brown dwarfs in the Lambda Orionis star-forming region. II. Rotation, activity and other properties of spectroscopically confirmed members of Collinder 69*, Bayo A., Barrado D., Huelamo N., Morales-Calderon M., **Melo C.**, Stauffer J., Stelzer B., A&A 2012, A80
35. *Search for giant planets in M 67. I. Overview*, Pasquini L., Brucalassi A., Ruiz M. T., Bonifacio P., Lovis C., Saglia R., **Melo C.**, Biazzo K., Randich S., Bedin L. R., A&A 2012, A139
36. *Fluorine abundances in dwarf stars of the solar neighbourhood*, Recio-Blanco A., de Laverny P., Worley C., Santos N. C., **Melo C.**, Israelian G., A&A 2012, A117
37. *Spectroscopy of very low mass stars and brown dwarfs in the Lambda Orionis star forming region. I. Enlarging the census down to the planetary mass domain in Collinder 69*, Bayo A., Barrado D., Stauffer J.,

- Morales-Calderon M., **Melo C.**, Huelamo N., Bouy H., Stelzer B., Tamura M., Jayawardhana R., A&A 2011, A63
38. *Early-type stars observed in the ESO UVES Paranal Observatory Project - III. Sub-parsec and au-scale structure in the interstellar medium*, Smoker J. V., Bagnulo S., Cabanac R., Keenan F. P., Fossati L., Ledoux C., Jehin E., **Melo C.**, MNRAS 2011, 59
 39. *Connecting RS Ophiuchi to [some] type Ia supernovae*, Patat F., Chugai N. N., Podsiadlowski P., Mason E., **Melo C.**, Pasquini L., A&A 2011, A63
 40. *A ground-based Ks-band detection of the thermal emission from the transiting exoplanet WASP-4b*, Caceres C., Ivanov V. D., Minniti D., Burrows A., Selman F., **Melo C.**, Naef D., Mason E., Pietrzynski G., A&A 2011, A5
 41. *Lithium abundances and extra mixing processes in evolved stars of M 67*, Canto Martins B. L., Lebre A., Palacios A., de Laverny P., Richard O., **Melo C. H. F.**, Do Nascimento J. D., Jr., de Medeiros J. R., A&A 2011, A94
 42. *The HARPS search for southern extrasolar planets. XXV. Results from the metal-poor sample*, Santos N. C., et al., A&A 2011, A112
 43. *A brown dwarf companion to the intermediate-mass star HR 6037*, Huélamo N., et al., A&A 2010, L54
 44. *Evidence against the young hot-Jupiter around BD +20 1790*, Figueira P., et al., A&A 2010, L8
 45. *The HARPS search for southern extra-solar planets. XXI. Three new giant planets orbiting the metal-poor stars HD 5388, HD 181720, and HD 190984*, Santos N. C., et al., A&A 2010, A47
 46. *Do stellar magnetic cycles influence the measurement of precise radial velocities?*, Santos N. C., Gomes da Silva J., Lovis C., **Melo C.**, A&A 2010, A54
 47. *A homogeneous spectroscopic analysis of host stars of transiting planets*, Ammler-von Eiff M., Santos N. C., Sousa S. G., Fernandes J., Guillot T., Israelian G., Mayor M., **Melo C.**, A&A 2009, 523
 48. *High cadence near infrared timing observations of extrasolar planets. I. GJ 436b and XO-1b*, Caceres C., Ivanov V. D., Minniti D., Naef D., **Melo C.**, Mason E., Selman F., Pietrzynski G., A&A 2009, 481
 49. *The triple system HIP 96515: a low-mass eclipsing binary with a DB white dwarf companion*, Huélamo N., et al., A&A 2009, 873
 50. *Exploring the Time Axis High Resolution Timing Observations with Present and Future Instrumentation*, Ivanov V. D., Caceres C., Mason E., Naef D., Selman F., **Melo C.**, Minniti D., Pietrzynski G., ASSP 2009, 487

Selected non-refereed publications

1. *Total Solar Eclipse Over La Silla*, Ventura, L., **Melo, C.**, Christensen, L. L., Lyubenova, M.; Comerón, F., 2019, The Messenger, 177, 43
2. *Near-InfraRed Planet Searcher to Join HARPS on the ESO 3.6-metre Telescope*, Bouchy et al., 2017, The Messenger 169, 21
3. *The First NEON School in La Silla*, Dennefeld M., Melo C., Selman F., 2016, The Messenger 164, 47
4. *Reflected Light from Giant Planets in Habitable Zones: Tapping into the Power of the Cross-Correlation Function*, Martins J. H. C., Santos N. C., Figueira P., Melo C., *Origins of Life and Evolution of Biospheres*, pp. 1-12 (2016)
5. *Report on the Workshop 400 Years of Stellar Rotation*, de Medeiros J. R., Melo C., Pasquini L., 2014, The Messenger, vol. 155, p. 55-57
6. *Accurate Sky Continuum Subtraction with Fibre-fed Spectrographs*, Yang Y., et al., 2013, The Messenger, vol. 151, p. 10-13
7. *Report on the Workshop "Observing Planetary Systems II"*, Dumas C., Sterzik M., Melo C., Siebenmorgen R., Girard J., Mouillet D., 2012, The Messenger, vol. 148, p. 44-46

8. *Planets or Spots: tests and diagnostics in single and multi-planet systems*, Figueira P., Santos N. C., Bonfils X., Huelamo N., Melo C. H. F., Gillon M., Azevedo R., Udry S., Mayor M., 2010, EAS Publications Series, Volume 42, 2010, pp.131-135
9. *TW Hya under CRILES light: evidence against the presence of a hot Jupiter*, Figueira P., Pepe F., Santos N. C., Melo C. H. F., Bonfils X., Huelamo N., Udry S., Queloz D., 2010, EAS Publications Series, Volume 42, 2010, pp.125-129
10. *Report on the CAUP and ESO Workshop Towards other Earths: Perspectives and Limitations in the ELT Era*, Santos N., Melo C., Pasquini L., Glindeman A., 2010, The Messenger, vol. 139, p. 49-51
11. *sacy: open clusters connected to young nearby associations*, Torres C. A. O., Quast G. R., Melo C. H. F., Sterzik M., de la Reza R., da Silva L., 2010, Star clusters: basic galactic building blocks throughout time and space, Proceedings of the International Astronomical Union, IAU Symposium, Volume 266, p. 544-544
12. *A Tenth Birthday Present for UVES: A CCD Upgrade of the Red Arm*, Smoker J., et al., 2009, The Messenger, vol. 138, p. 8-9
13. *Report on the ESO Workshop Six Years of FLAMES Operations*, Melo C., Primas F., Pasquini L., Patat F., Smoker J., 2009, The Messenger, vol. 135, p. 17-19
14. *Young Nearby Loose Associations*, Torres C. A. O., Quast G. R., Melo C. H. F., Sterzik M. F., 2008, Handbook of Star Forming Regions, Volume II: The Southern Sky ASP Monograph Publications, Vol. 5. Edited by Bo Reipurth, p.757
15. *Behind the Scenes of the Discovery of Two Extrasolar Planets: ESO Large Programme 666*, Minniti D., et al., 2008, The Messenger, vol. 133, p. 21-25
16. *Detector Upgrade for FLAMES: GIRAFFE Gets Red Eyes*, Melo C., et al., 2008, The Messenger, vol. 133, p. 17-19
17. *Report on the International Workshop on Star Formation Across the Milky Way Galaxy held at ESO, Vitacura, Chile 3-6 March 2008*, Sterzik M., Melnick J., Melo C., 2008, The Messenger, vol. 132, p. 49-50
18. *A Correlation Between the Activity Level and the Radial-velocity for Solar-type Stars?* Santos N. C., Melo C., Lovis C., Billeres M., Precision Spectroscopy in Astrophysics, Proceedings of the ESO/Lisbon/Aveiro Conference held in Aveiro, Portugal, 11-15 September 2006. Edited by N.C. Santos, L. Pasquini, A.C.M. Correia, and M. Romaniello. Garching, Germany, 2008 pp. 317-318
19. *Transiting Planets: Follow the FLAMES...*, Melo C., Santos N. C., Pont F., Mayor M., Udry S., Queloz D., Bouchy F., Precision Spectroscopy in Astrophysics, Proceedings of the ESO/Lisbon/Aveiro Conference held in Aveiro, Portugal, 11-15 September 2006. Edited by N.C. Santos, L. Pasquini, A.C.M. Correia, and M. Romaniello. Garching, Germany, 2008 pp. 185-189
20. *Using the h-index to Explore the Scientific Impact of the VLT*, Grothkopf U., Melo C., Erdmann C., Kaufer A., Leibundgut B., 2007, The Messenger, volume 128, page 67
21. *Planet formation: constraints from transiting extrasolar planets*, Guillot T., Santos N., Pont F., Iro N., Melo C., Ribas I., European Planetary Science Congress 2006. Berlin, Germany, 18 - 22 September 2006., p.120
22. *Transiting Extra-solar Planets, follow the FLAMES ...*, Pont F., Bouchy F., Queloz D., Melo C., Santos N., Udry S., Mayor M., Moutou C., 2005, The Messenger (ISSN0722-6691), No.120, p. 19-21
23. *Two New Very Hot Jupiters in the FLAMES spotlight*, Melo C., Bouchy F., Pont F., Santos N. C., Mayor M., Queloz D., Udry S., 2004, The Messenger (ISSN0722-6691), No.116, p. 32-34
24. *The UVES Paranal Observatory Project: A Library of High- Resolution Spectra of Stars across the Hertzsprung-Russell Diagram*, Bagnulo S., Jehin E., Ledoux C., Cabanac R., Melo C., Gilmozzi R., ESO Paranal Science Operations Team, 2003, The Messenger (ISSN0722-6691), No.114, p. 10-14

Last update: August, 2020

² This book chapter has 265 citations (ADS, May 2020)

³ This publication (UVES POP) has 330 citations (ADS, May 2020)