

# Curriculum Vitæ - Vinicius Moris Placco

last update: June 23, 2025  
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## Personal information

Full name Vinicius [v-knee-see-uh-s] Moris Placco  
Languages Portuguese (native), English (fluent),  
Spanish (intermediate), Italian (basic)  
  
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## Employment / Appointments

2024– US National Gemini Office Head – Community Science & Data Center  
U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory  
  
2022– Associate Astronomer – Community Science & Data Center  
U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory  
  
2023–2024 US National Gemini Office Acting Head – Community Science & Data Center  
U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory  
  
2020–2022 Associate Scientist – Community Science & Data Center  
U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory  
  
2015–2020 Research Assistant Professor – Department of Physics  
University of Notre Dame  
  
2018–2020 Faculty Fellow – Liu Institute for Asia and Asian Studies  
University of Notre Dame  
  
2014–2015 Science Fellow  
Gemini Observatory – Northern Operations Center  
Association of Universities for Research in Astronomy  
  
2013–2014 Postdoctoral Fellow  
National Optical Astronomy Observatory  
Association of Universities for Research in Astronomy  
  
2010–2013 Postdoctoral Fellow  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Universidade de São Paulo  
  
2010–2011 External Consultant - Data Science and Statistics  
Suzuki Veículos do Brasil S/A  
  
2010–2010 Freelance Translator - Astronomy Brasil Magazine  
Ediouro Duetto Editorial

## Education

- 2007–2010    Doctorate degree in Astronomy  
*Search for very metal-poor stars based on carbon over-abundance*  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Universidade de São Paulo
- 2005–2007    Master's degree in Astronomy  
*Abundance patterns among very metal-poor stars in the Galaxy: a statistical approach*  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Universidade de São Paulo
- 2001–2005    Bachelor's degree in Physics (concentration: Astronomy)  
Instituto de Física  
Universidade de São Paulo

## Awards

- 2024    *Outstanding Achievement Award – Science*  
U.S. National Science Foundation National Optical-Infrared Astronomy Research Laboratory  
Association of Universities for Research in Astronomy
- 2011    *Featured Astronomy thesis of the year 2010*  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Universidade de São Paulo
- 2005    *Best Astronomy undergraduate project*  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Universidade de São Paulo

## Observatory Experience

### Leadership roles/Service

- 2020–present Hubble Space Telescope External Proposal reviewer
- 2018–present Member of the J-PAS Survey Science Committee ([Javalambre Physics of the Accelerating Universe Survey](#))
- 2018–present Co-coordinator of the Resolved Stellar Population Working Group of the J-PAS Survey
- 2018–present Member of the Maunakea Spectroscopic Explorer (MSE) [Science Team](#)
- 2017–present Subaru Telescope Proposal reviewer – category group: Normal Stars, Metal-Poor Stars
- 2017–present Member of the S-PLUS Advisory Committee ([Southern Photometric Local Universe Survey](#))
- 2017–present Principal Investigator of the S-PLUS Short Survey
- 2019–2020 Member of the NSF NOIRLab Time Allocation Committee - [Galactic Panel 2](#)
- 2017–2020 US representative for the Gemini Observatory Users Committee
- 2018–2019 Member of the NOAO Time Allocation Committee - [Galactic Panel 2](#)
- 2017–2018 Member of the Gemini OCS Upgrades Working Group
- 2018 US Extremely Large Telescope Program – [First Stars Key Science Project](#)

### Operations and Instrument/User Support

- 2020–present **NSF NOIRLab:** Community Science & Data Center – US National Gemini Office  
 Product development for the Gemini user community:  
     [Twitter account bots](#) – [daily completion](#), [weekly paper](#), [monthly completion](#), [other metrics](#)  
     [GitHub repositories](#) – [DRAGONS Imaging tutorials](#), [IRAF Spectroscopy tutorials](#), [users dashboard](#)  
 Co-organization of AAS Splinter Meetings  
 Responsible for managing the [NOIRLab IRAF modernization project](#)  
 Migration and maintenance of the [US NGO Portal](#)  
 Migration and maintenance of the [GMOS Cookbook](#)  
 Migration and maintenance of the [XDGNIRS Pipeline](#)  
 Gemini HelpDesk – Responsible for selected Tiers 2 and 3 inquiries
- 2021–present **NSF NOIRLab:** Communications, Education & Engagement  
 Supported the migration of the NOAO Science website to the new [NOIRLab Science website](#)  
 Developed, revised, and curated content for the [NOIRLab Science website](#)  
 Serve as a liaison between RSS and CEE  
 Support science staff in adding/editing content on the science webpages  
 Responding/routing science inquiries from [usercomms@noirlab.edu](mailto:usercomms@noirlab.edu) and [info@noirlab.edu](mailto:info@noirlab.edu)  
 Responsible for the curation of the [NOIRLab Capabilities Brochure](#)
- 2021–2022 **NSF NOIRLab:** Gemini Observatory – Science User Support Department  
 Part of the Science Verification effort for the DRAGONS spectroscopic routines  
 Early testing of the quick-look and interactive tools for DRAGONS  
 Performance comparison between Gemini/IRAF and DRAGONS packages
- 2014–2015 **Gemini-North:** Operations  
 Support Scientist for Phase II programs  
 Backup support for instrument teams  
 Interface between observatory and visitors (staff, scientists, and others)  
 Interactions with astronomers, engineers, IT personnel, and facilities staff  
 Community support (help-desk and troubleshooting)  
 Write/edit/update internal and external webpages  
 Weekly operations meetings  
 Queue observer  
 Data reductions

- 2014–2015 **Gemini-North:** GMOS Instrument Team  
 Instrument performance monitoring pipeline  
[Throughput characterization](#)  
 Commissioning of AO capabilities  
 Write/edit/update internal and external instrument webpages  
 Data quality assessment  
 Commissioning of Hamamatsu CCD at GMOS-S
- 2014–2015 **Gemini-North:** GRACES Instrument Team  
 Commissioning of the instrument  
 Developed early data-reduction pipeline  
 Write/edit/update internal and external instrument webpages  
 Developed exposure time calculator (GRACES ITC v0.1 Beta)
- 2008–2012 **SOAR Telescope:** remote observing station – University of São Paulo  
 Responsible for operations and maintenance  
 Develop data reduction tools  
 Edit/write manuals and data analysis cookbooks  
 User support and troubleshooting  
 Configure, quote, and purchase new workstations and teleconference hardware  
 Work with staff and IT personel to ensure access to buildings and computers  
 Support daytime calibrations / nighttime observations

## Observing Experience

Period	Telescope	# of nights	instrument	mode
2019–present	CTIO/Blanco	16	COSMOS	remote
2011–present	ESO/NTT	12	EFOSC2	visitor
2008–present	SOAR	40+	Goodman OSIRIS	remote
2013–2018	KPNO/Mayall	20+	RCSPEC KOSMOS	visitor/remote
2014–2015	Gemini North	12	GMOS GRACES GNIRS NIRI NIFS	queue observer
2014–2015	Gemini South	2	GMOS	remote
2013	McDonald 2.1m	4	ES2 Spectrometer	visitor

## Research Experience

### Funding

#### Current

2023–2026 Hubble Space Telescope (Co-I)  
*Fission of Transuranic Nuclei: A Potential Observational Signature in Metal-Poor Stars*  
Space Telescope Science Institute (USD 2,873)

#### Past (Total: USD 470,229)

2020–2022 Hubble Space Telescope (Co-I)  
*Testing r-process nucleosynthesis models with two r-process enhanced stars*  
Space Telescope Science Institute (USD 35,000)

2019–2021 Hubble Space Telescope (Co-PI)  
*HD 222925: A unique opportunity to study the full range of nuclei produced by a single r-process event*  
Space Telescope Science Institute (USD 60,732)

2018–2020 Hubble Space Telescope (Co-PI)  
*The Unexplored Domains of the s-Process*  
Space Telescope Science Institute (USD 119,104)

2018 Liu Institute for Asia & Asian Studies (PI)  
*Stellar Archaeology as a Time Machine to the First Stars*  
University of Notre Dame (USD 600 - Travel support for conference)

2018 Liu Institute for Asia & Asian Studies (PI)  
*TDLI Workshop on The Exploding Universe*  
University of Notre Dame (USD 2,600 - Travel support for conference)

2015–2017 Hubble Space Telescope (Co-I)  
*The First Detections of Phosphorus, Sulphur, and Zinc in a Bona-Fide Second-Generation Star*  
Space Telescope Science Institute (USD 85,293)

2016–2017 Faculty Research Support Program Initiation Grant (PI)  
*Identification of CEMP Stars from S-PLUS Photometry using Artificial Neural Networks*  
University of Notre Dame (USD 10,000)

2013–2014 FAPESP (State of São Paulo Research Foundation) – Postdoctorate  
*(re)discovery and analysis of metal-poor stars in the Milky Way*  
National Optical Astronomy Observatory (USD 71,400)

2010–2013 FAPESP (State of São Paulo Research Foundation) – Postdoctorate  
*The Milky Way Halo revisited*  
Universidade de São Paulo (USD 85,500)

## Fellowships

- 2007–2010    Doctorate – FAPESP (07/04356-3) – Universidade de São Paulo  
*Search for very metal-poor stars based on carbon over-abundance*
- 2005–2007    Master's – FAPESP (05/01023-8) – Universidade de São Paulo  
*Abundance patterns among very metal-poor stars in the Galaxy: a statistical approach*
- 2004–2005    Undergraduate research project – CNPq/PIBIC – Universidade de São Paulo  
*Descoberta e Análise de Objetos com Linhas em Emissão no Survey HK*
- 2002–2004    Undergraduate research project – FAPESP (02/04704-8) – Universidade de São Paulo  
*Construção de câmara de alvo gasoso para produção de feixes radioativos*

## Visiting Faculty/Postdoc/Graduate Student

- 2023/2022    Universidade de São Paulo  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Funding: NOIRLab, USP/FAPESP (Brazil)
- 2020/2018    Universidade de São Paulo  
Instituto de Astronomia, Geofísica e Ciências Atmosféricas  
Funding: USP/FAPESP (Brazil), JINA-CEE
- 2018    Chungnam National University  
Department of Astronomy & Space Science  
Funding: CNU (Republic of Korea)
- 2014    University of Notre Dame  
Department of Physics  
Funding: Gemini Observatory and JINA (Joint Institute for Nuclear Astrophysics)
- 2014/2012    Massachusetts Institute of Technology  
Kavli Institute for Astrophysics and Space Research  
Funding: Gemini Observatory, FAPESP (The State of São Paulo Research Foundation – Brazil)
- 2013/2012    National Optical Astronomy Observatory  
Kitt Peak National Observatory  
Funding: FAPESP (Brazil)
- 2013    New Mexico State University  
Department of Astronomy  
Funding: FAPESP (Brazil)
- 2010/2008    Universität Heidelberg  
Zentrum für Astronomie  
Funding: Universität Heidelberg (Germany), FAPESP, PROEX (Brazil)
- 2010/2009    Michigan State University  
2007    Physics and Astronomy Department  
Funding: JINA (USA), FAPESP, PROEX (Brazil)

## Telescope time allocations

**Approved observing projects: 197**

**Total awarded: 7080.96 hours**

\*does not include time allocated through university partnerships

## Principal Investigator

**Approved observing projects: 52**

**Total awarded: 1783.30 hours**

52. 2025A - Gemini South - GS-2025A-Q-408 (Band 4): 11.50 hours
51. 2023B - Gemini South - GS-2023B-FT-301 (Fast Turnaround): 2.25 hours
50. 2023A - Gemini South - GS-2023A-SV-101 (Band 1): 4.0 hours
49. 2023A - Gemini South - GS-2023A-Q-407 (Band 4): 40.0 hours
48. 2022A - Gemini South - GS-2022A-Q-406 (Band 4): 30.0 hours
47. 2022A - CTIO Blanco - 2022A-210002: 5.0 nights
46. 2021A - Gemini South - GS-2021A-Q-419 (Band 4): 40.0 hours
45. 2021A - CTIO Blanco - 2021A-0000: 5.0 nights
44. 2020A - CTIO Blanco - 2020A-0032: 5.0 nights
43. 2019B - CTIO Blanco - 2019B-0069: 5.0 nights
42. 2019A - Gemini South - GS-2019A-Q-408 (Band 4): 21.0 hours
41. 2019A - Gemini North - GN-2019A-Q-402 (Band 4): 27.0 hours
40. 2018B - Gemini North - GN-2018B-Q-403 (Band 4): 20.0 hours
39. 2018B - Gemini South - GS-2018B-Q-402 (Band 4): 20.0 hours
38. 2018A - Gemini South - GS-2018A-Q-402 (Band 4): 30.0 hours
37. 2017B - Gemini North - GN-2017B-Q-84 (Band 4): 39.0 hours
36. 2017A - Gemini South - GS-2017A-FT-3: 5.5 hours
35. 2017A - KPNO Mayall - 2017A-0295: 7.0 nights
34. 2016B - Gemini North - GN-2016B-Q-85 (Band 4): 50.0 hours
33. 2016B - Gemini South - GS-2016B-Q-86 (Band 4): 50.0 hours
32. 2016A - Gemini South - GS-2016A-Q-107 (Band 4): 50.0 hours
31. 2015B - Gemini North - GN-2015B-Q-100 (Band 4): 30.0 hours
30. 2015B - Gemini South - GS-2015B-Q-104 (Band 4): 50.0 hours
29. 2015B - ESO/NTT - 096.D-0018(A): 5.0 nights
28. 2015A - Gemini North - GN-2015A-Q-401 (Band 4): 30.0 hours
27. 2015A - Gemini South - GS-2015A-Q-205 (Band 4): 50.0 hours
26. 2015A - ESO/NTT - 095.D-0202(A): 4.0 nights
25. 2015A - KPNO Mayall - 2015A-0071: 6.0 nights
24. 2015A - SOAR - 2015A-0071: 5.0 nights
23. 2014B - Gemini South - GS-2014B-Q-85 (Band 4): 30.0 hours
22. 2014B - Gemini North - GN-2014B-Q-102 (Band 4): 30.0 hours
21. 2014A - Gemini South - GS-2014A-Q-92 (Band 4): 33.3 hours
20. 2014A - Gemini North - GN-2014A-Q-101 (Band 3): 16.7 hours



19. 2014A - Gemini North - GN-2014A-Q-105 (Band 4): 33.3 hours
18. 2013B - Gemini South - GS-2013B-Q-89 (Band 4): 25.0 hours
17. 2013B - Gemini North - GN-2013B-Q-105 (Band 4): 25.0 hours
16. 2013B - SOAR - SO2013B-001: 30.0 hours
15. 2013A - SOAR - SO2013A-018: 34.0 hours
14. 2012B - Gemini South - GS-2012B-Q-65 (Band 3): 10.0 hours – queue
13. 2012B - Gemini South - GS-2012B-Q-84 (Band 4): 70.0 hours – queue
12. 2012B - Gemini North - GN-2012B-Q-284 (Band 4): 70.0 hours – queue
11. 2012B - ESO/NTT - 090.D-0275(A): 4 nights – classical
10. 2012B - SOAR - SO2012B-001: 24.0 hours – remote
9. 2012A - Gemini South - GS-2012A-Q-76 (Band 3): 6.0 hours – queue
8. 2012A - ESO/NTT - 089.D-0331(A): 4 nights – classical
7. 2012A - SOAR - SO2012A-003: 24.0 hours – remote
6. 2011B - ESO/NTT - 088.D-0344(A): 4 nights – classical
5. 2011B - SOAR - SO2011B-002: 24.0 hours – remote
4. 2011A - Gemini South - GS-2011A-Q-86 (Band 4): 4.0 hours – queue
3. 2011A - Gemini North - GN-2011A-Q-88 (Band 3): 1.3 hours – queue
2. 2011A - Gemini North - GN-2011A-Q-122 (Band 4): 6.7 hours – queue
1. 2011A - SOAR - SO2011A-010: 17.0 hours – remote

### Co-Investigator

**Approved observing projects: 145**

**Total awarded: 5297.66 hours**

145. 2025A - Gemini South - GS-2025A-Q-114 (Band 1 - GT): 50.00 hours
144. 2025A - Gemini South - GS-2025A-Q-131 (Band 1): 2.70 hours
143. 2025A - Gemini South - GS-2025A-Q-226 (Band 2): 3.00 hours
142. 2025A - Gemini South - GS-2025A-Q-327 (Band 3): 11.00 hours
141. 2024B - Gemini South - GS-2024B-Q-416 (Band 4): 20.00 hours
140. 2024B - Gemini South - GS-2024B-Q-114 (Band 1 - GT): 50.00 hours
139. 2024B - Gemini South - GS-2024B-Q-321 (Band 3): 8.00 hours
138. 2024A - Gemini South - GS-2024A-FT-115 (Fast Turnaround): 5.44 hours
137. 2024A - CTIO/Blanco - 2024A-646244 (survey): 85.00 hours
136. 2024A - Gemini South - GS-2024A-Q-109 (Band 1): 3.80 hours
135. 2024A - Gemini South - GS-2024A-Q-112 (Band 1 - GT): 50.00 hours
134. 2024A - Gemini South - GS-2024A-Q-130 (Band 1): 13.00 hours
133. 2024A - Gemini South - GS-2024A-Q-206 (Band 2): 21.20 hours
132. 2024A - Gemini South - GS-2024A-Q-225 (Band 2): 16.00 hours
131. 2024A - Gemini South - GS-2024A-Q-233 (Band 2): 1.10 hours
130. 2024A - Gemini South - GS-2024A-Q-324 (Band 3): 4.50 hours
129. 2024A - Gemini South - GS-2024A-Q-333 (Band 3): 3.41 hours

128. 2023B - CTIO/Blanco - 2023B-646244 (survey): 65.00 hours
127. 2023B - Southern African Large Telescope - 2023-2-SCI-005: 14.5 hours
126. 2023B - Gemini South - GS-2023B-FT-210 (Fast Turnaround): 6.84 hours
125. 2023B - Gemini South - GS-2023B-Q-107 (Band 1): 20.00 hours
124. 2023B - Gemini South - GS-2023B-Q-309 (Band 3): 4.09 hours
123. 2023B - Gemini South - GS-2023B-Q-322 (Band 3): 5.06 hours
122. 2023A - Southern African Large Telescope - 2023-1-SCI-007: 8.85 hours
121. 2023A - Gemini South - GS-2023A-Q-412 (Band 4): 42.00 hours
120. 2022B - Gemini North - GN-2022B-Q-211 (Band 2): 11.40 hours
119. 2022B - Gemini South - GS-2022B-Q-227 (Band 2): 7.10 hours
118. 2022B - Gemini South - GS-2022B-Q-318 (Band 3): 10.96 hours
117. 2022B - Southern African Large Telescope - 2022-2-SCI-011: 20.0 hours
116. 2022A - SOAR - 2022A-001: 8 hours
115. 2022A - SOAR - 2022A-006: 40 hours
114. 2022A - Subaru - KR-2022A-008: 10.00 hours
113. 2022A - Gemini South - GS-2022A-Q-128 (Band 1): 1.20 hours
112. 2022A - Gemini South - GS-2022A-Q-132 (Band 1): 4.60 hours
111. 2022A - Gemini South - GS-2022A-Q-234 (Band 2): 3.10 hours
110. 2022A - Gemini South - GS-2022A-Q-233 (Band 2): 11.60 hours
109. 2022A - Gemini South - GS-2022A-Q-238 (Band 2): 4.00 hours
108. 2022A - Gemini South - GS-2022A-Q-322 (Band 3): 5.20 hours
107. 2022A - Gemini South - GS-2022A-Q-323 (Band 3): 2.20 hours
106. 2022A - Gemini South - GS-2022A-Q-325 (Band 3): 9.40 hours
105. 2021B - Gemini North - GN-2021B-Q-111 (Band 1): 9.70 hours
104. 2021B - Gemini South - GS-2021B-Q-127 (Band 1): 2.20 hours
103. 2021B - Gemini South - GS-2021B-Q-232 (Band 2): 6.10 hours
102. 2021B - Gemini South - GS-2021B-Q-130 (Band 1): 3.60 hours
101. 2021B - Gemini South - GS-2021B-Q-321 (Band 3): 16.60 hours
100. 2021A - Gemini North - GN-2021A-FT-209 (Band 1): 2.20 hours
99. 2021A - Gemini North - GN-2021A-FT-205 (Band 1): 3.00 hours
98. 2021A - Gemini North - GN-2021A-Q-111 (Band 1): 14.20 hours
97. 2021A - Gemini South - GS-2021A-Q-230 (Band 2): 10.00 hours
96. 2021A - SOAR - 2021A-007: 40 hours
95. 2020A - McDonald 2.7m - McD20-1-2.7-7: 7.0 nights
94. 2019B - Gemini North - GN-2019B-Q-403 (Band 4): 9.40 hours
93. 2019B - McDonald 2.7m - McD19-3-2.7-1: 7.0 nights
92. 2019B - SOAR - 2019B-0013: 26 hours
91. 2019A - Gemini North - GN-2019A-Q-309 (Band 3): 22.73 hours
90. 2019A - McDonald 2.7m - McD19-1-2.7-3: 17.0 nights
89. 2019A - McDonald 2.1m - McD19-1-2.7-1: 5.0 nights

88. 2018B - Gemini North - GN-2018B-Q-122 (Band 1): 10.0 hours
87. 2018B - Gemini North - GN-2018B-Q-316 (Band 3): 25.00 hours
86. 2018B - Gemini South - GS-2018B-Q-315 (Band 3): 47.27 hours
85. 2018B - SOAR - 2018B-0010: 26 hours
84. 2018A - Gemini North - GN-2018A-Q-403 (Band 4): 89.10 hours
83. 2018A - Gemini South - GS-2018A-Q-406 (Band 4): 7.90 hours
82. 2018A - LCO/Magellan Telescope - Carnegie Time: 2 nights
81. 2018A - LCO/duPont Telescope - Carnegie Time: 18 nights
80. 2018A - Apache Point Observatory - UW08: 5.0 nights
79. 2018A - LCO/Magellan Telescope - Chilean Time: 3 nights
78. 2018A - SOAR - 2018A-0021: 36 hours
77. 2018A - McDonald 2.7m - McD18-1-2.7-3: 7.0 nights
76. 2017B - LCO/Magellan Telescope - Michigan Time: 2.5 nights
75. 2017B - Gemini North - GN-2017B-Q-18 (Band 1): 10.2 hours
74. 2017B - Gemini North - GN-2017B-FT-7: 6.28 hours
73. 2017B - Gemini North - GN-2017B-Q-75 (Band 3): 41.82 hours
72. 2017B - Gemini North - GN-2017B-Q-79 (Band 4): 63.64 hours
71. 2017B - Gemini South - GS-2017B-Q-75 (Band 3): 20.91 hours
70. 2017B - Gemini South - GS-2017B-Q-84 (Band 4): 107.82 hours
69. 2017A - Southern African Large Telescope - 2017-1-MLT-012: 55.6 hours
68. 2017A - Gemini North - GN-2017A-Q-82 (Band 3): 202.0 hours
67. 2017A - Gemini South - GS-2017A-Q-86 (Band 3): 142.5 hours
66. 2017A - ESO/NTT - 099.D-0428: 5.0 nights
65. 2017A - LCO/Magellan Telescope - Carnegie Time: 3 nights
64. 2017A - LCO/duPont Telescope - Carnegie Time: 19 nights
63. 2017A - SOAR - 2017A-0016: 40 hours
62. 2016B - Gemini North - GN-2016B-Q-77 (Band 3): 6.4 hours
61. 2016B - Gemini South - GS-2016B-Q-81 (Band 3): 32.3 hours
60. 2016B - ESO/NTT - 098.D-0434: 4.0 nights
59. 2016B - Hubble Space Telescope - Cycle 24 - HST-GO-14765: 40 orbits
58. 2016B - LCO/duPont Telescope - Carnegie Time: 5 nights
57. 2016A - ESO/NTT - 097.D-0196: 7.0 nights
56. 2016A - Apache Point Observatory - UW07: 2.5 nights
55. 2016A - Gemini North - GN-2016A-Q-17 (Band 1): 9.8 hours
54. 2016A - Gemini North - GN-2016A-Q-75 (Band 3): 79.4 hours
53. 2016A - Gemini South - GS-2016A-Q-76 (Band 3): 74.0 hours
52. 2016A - SOAR - 2016A-0019: 4.0 nights
51. 2015B - Southern African Large Telescope - 2015-2-SCI-056: 117.8 hours
50. 2015B - Hubble Space Telescope - Cycle 23 - HST-GO-14231: 18 orbits
49. 2015B - Gemini North - GN-2015B-Q-86 (Band 3): 26.5 hours

48. 2015B - Gemini South - GS-2015B-Q-71 (Band 3): 42.9 hours
47. 2015B - SOAR - 2015B-0020: 5.0 nights
46. 2015A - ESO/VLT - 095.D-0504(A): 30.0 hours
45. 2015A - Gemini North - GN-2015A-Q-76 (Band 3): 45.8 hours
44. 2015A - Gemini South - GS-2015A-Q-77 (Band 3): 42.8 hours
43. 2015A - Gemini South - GS-2015A-Q-92 (Band 4): 26.0 hours
42. 2014B - ESO/VLT - DDT293.D-5036(A): 2.4 hours
41. 2014B - Gemini South - GS-2014B-Q-67 (Band 3): 55.0 hours
40. 2014B - Gemini North - GN-2014B-Q-85 (Band 3): 55.0 hours
39. 2014B - KPNO Mayall - 2014B-0231: 3.0 nights
38. 2014B - SOAR - 2014B-0231: 3.0 nights
37. 2014A - Gemini South - GS-2014A-Q-88 (Band 3): 66.7 hours
36. 2014A - KPNO Mayall - 2014A-0323: 8.0 nights
35. 2013B - KPNO Mayall - 2013B-0046: 6.5 nights
34. 2013B - Gemini South - GS-2013B-Q-75 (Band 3): 50.0 hours
33. 2013B - Gemini North - GN-2013B-Q-81 (Band 3): 50.0 hours
32. 2013B - SOAR - SO2013B-S102: 17.0 hours (long term)
31. 2013B - ESO/NTT - 092.D-0308(A): 6 nights
30. 2013B - McDonald 2.1m - McD13-3: 5 nights
29. 2013B - LNA/Brazil - 2013B-P012: 6 nights
28. 2013B - NOT (Nordic Optical Telescope) - 48-031: 3.5 nights
27. 2013A - Gemini North - GN-2013A-Q-113 (Band 4): 54.5 hours
26. 2013A - Gemini South - GS-2013A-Q-91 (Band 3): 54.6 hours
25. 2013A - Gemini South - GS-2013A-Q-95 (Band 4): 10.9 hours
24. 2013A - ESO/NTT - 091.D-0292(A): 6 nights
23. 2013A - LNA/Brazil - 2013A-P030: 4 nights
22. 2013A - SOAR - SO2013A-LP2: 17.0 hours (long term)
21. 2013A - NOT (Nordic Optical Telescope) - 47-003: 3.0 nights
20. 2012B - NOT (Nordic Optical Telescope) - 46-011: 2.5 nights
19. 2012B - ESO/VLT (X-Shooter) - 090.D-0321(A): 12 hours
18. 2012B - LCO/Magellan - MAG/12B/9: 2 nights
17. 2012B - AAO/AAT - AAT/12B/032: 6 nights
16. 2012B - SOAR - SO2012B-005: 8.0 hours (long term)
15. 2012A - Gemini South - GS-2012A-Q-81 (Band 4): 74.0 hours
14. 2012A - AAO/AAT - AAT/12A/011: 4 nights
13. 2012A - LCO/Magellan - MAG/12A/7: 2 nights
12. 2012A - SOAR - SO2012A-002: 16.0 hours
11. 2011B - Gemini South - GS-2011B-Q-91 (Band 4): 75.0 hours
10. 2011B - SOAR (SO2011B-008): 24.0 hours
9. 2011A - Gemini South - GS-2011A-Q-85 (Band 3): 63.4 hours

8. 2011A - CFHT - CF2011A-002: 13.9 hours
7. 2010B - CFHT - 10BB05A/10BB99B: 13.9 hours
6. 2010A - Gemini South - GS-2010A-Q-78 (Band 4): 25.0 hours
5. 2009B - SOAR - SO2009B-004: 17.0 hours
4. 2009A - SOAR - SO2009A-0249: 6 nights
3. 2009A - SOAR - SO2009A-014: 32.0 hours
2. 2008A - SOAR - SO2008A-006: 3 nights
1. 2007B - SOAR - SO2007B-006: 3 nights

## Invited / Contributed Presentations

### 2025

- [94.](#) Kavli Institute for Cosmological Physics | The University of Chicago - Open Group Seminars  
*BD+44°493: Where Near Field Cosmology Meets Exoplanet Science*
- [93.](#) WIYN Board Meeting – Lunch Science Presentation  
*BD+44°493: Chemo-Dynamics and Constraints on Companion Planetary Masses from WIYN/NEID Spectroscopy*
- [92.](#) Huachuca Astronomy Club – Monthly Science Presentation  
*A tale of two stars: Revealing the Age and Chemical Evolution of the Universe*
- [91.](#) Kitt Peak National Observatory – Docent in Training Program  
*Spectroscopy (a.k.a. the study of rainbows)*
- [90.](#) AAS 245 - A conversation about the Gemini Observatory Strategic Plan for the 2030s  
*GHOST Reduced Data Products for the Gemini Observatory Community and Beyond*
- [89.](#) National Astronomical Observatory of Japan - Science Colloquium  
*Stellar Genealogy: Rare Gems in the Milky Way as Probes of the Chemical Evolution of the Universe*

### 2024

- [91.](#) NSF NOIRLab – Users Committee for NOIRLab (UCN)  
*Aspects of Data Reduction Support at NOIRLab*
- [90.](#) Kitt Peak National Observatory – Docent in Training Program  
*Spectroscopy for People in a Hurry*
- [89.](#) Nuclear Physics in Astrophysics XI  
*Neutron-capture in the wild: finding r-process enhanced metal-poor stars in the Milky Way and beyond*
- [88.](#) Rare Gems in Big Data  
*Stellar Genealogy: Rare Gems in the Milky Way as Probes of the Chemical Evolution of the Universe*
- [87.](#) Kitt Peak National Observatory – Docent in Training Program  
*Spectroscopy (a.k.a. the study of rainbows)*

### 2023

- [87.](#) DELVE Collaboration Meeting  
*How to also find what you are not looking for: going on a fishing expedition*
- [86.](#) XIX J-PAS Collaboration Meeting  
*An R-process Enhanced Extremely Metal-Poor Star Identified with Narrow-band Photometry*
- [85.](#) International Research Network for Nuclear Astrophysics – Online Seminar Series (watch it on Youtube)  
*Neutron-capture in the wild: finding r-process enhanced metal-poor stars in the Milky Way and beyond*
- [84.](#) Observatório Nacional – S-PLUS 18th Collaboration Meeting  
*An r-process enhanced extremely metal-poor star identified by S-PLUS*
- [83.](#) NSF's NOIRLab – NOIRLab South Colloquium  
*What else can you find when looking for Carbon Enhanced Ultra Metal-Poor Stars? A GHOST Story*
- [82.](#) NSF's NOIRLab – GHOST Webinar Series  
*How to Find What You Are Not Looking For: The curious case of SPLUS J1424-2542*
- [81.](#) Lund University  
*What else can you find when looking for Ultra Metal-Poor Stars?*
- [80.](#) NSF's NOIRLab – SWEETS (Support Work Education and Exchange Talk Series)  
*The US National Gemini Office*

## 2022

- 79. Centro de Estudios de Física del Cosmos de Aragón – [18th J-PAS Collaboration Meeting](#)  
*The miniJPAS survey: stellar atmospheric parameters from 56 optical filters*
- 78. NSF's NOIRLab – [DECam at 10 years - Looking Back, Looking Forward](#)  
*Searching for Chemically Pristine Stars with Narrowband Photometry*
- 77. Centro Brasileiro de Pesquisas Físicas – [S-PLUS 17th Collaboration Meeting](#)  
*Mining S-PLUS for Metal-Poor Stars in the Milky Way*
- [76.](#) Planetário da Gávea, Rio de Janeiro – [O Céu do Sul e suas Maravilhas](#)  
*SPLUS J2104–0049 e a Evolução Química do Universo*
- [75.](#) Universidade de São Paulo – [Astronomia ao Meio-dia](#) (watch it on [Youtube](#) – in Portuguese)  
*A Tabela Periódica Astrofísica*
- [74.](#) Universidade de São Paulo – [Astrophysics Colloquium](#) (watch it on [Youtube](#))  
*Is Carbon Ubiquitous in the High-Redshift Universe? A Stellar Archaeology perspective*
- 73. [Gemini Observatory Science Meeting 2022](#)  
*Making good use of bad weather: a chemically pristine star found through the clouds with Gemini*
- [72.](#) Observatório Nacional – [Seminário da Coordenação de Astronomia e Astrofísica](#)  
*Stellar Archaeology and Near-Field Cosmology: Understanding the Chemical Evolution of the Universe*

## 2021

- 71. Universidade de São Paulo – [S-PLUS 16th Collaboration Meeting](#)  
*Mining the S-PLUS catalog to find chemically peculiar stars in the Galaxy*
- [70.](#) Instituto Nacional de Pesquisas Espaciais – [Seminários da Divisão de Astrofísica](#) (watch it on [watch it on Youtube](#))  
*Stellar Archaeology and Near-Field Cosmology: Understanding the Chemical Evolution of the Universe*
- [69.](#) Universidade Federal de Santa Catarina – [IX Encontro de Física e Astronomia da UFSC](#)  
*Stellar Archaeology and Near-Field Cosmology: Understanding the Chemical Evolution of the Universe*
- [68.](#) Joint Institute for Nuclear Astrophysics – [Physics of Atomic Nuclei High School Program](#)  
*The Age and Chemical Evolution of the Universe from Two Stars in the Milky Way*
- 67. Universidade de São Paulo – [S-PLUS 15th Collaboration Meeting](#)  
*Searching for low-metallicity stars in S-PLUS*
- [66.](#) NSF's NOIRLab – [Live from NOIRLab @ Hawai'i](#) (watch it on [Youtube](#))  
*A chemically-peculiar star found from its colors*

## 2020

- [65.](#) NSF's NOIRLab – [Live from NOIRLab @ Hawai'i](#) ([Youtube](#))  
*The Age and Chemical Evolution of the Universe from Two Stars in the Milky Way*
- [64.](#) NSF's NOIRLab – [Gemini Observatory Science Coffee](#)  
*From  $R=40$  to  $R=40,000$ : Mining narrow-band photometric catalogs in search of low-metallicity stars*
- [63.](#) Joint Institute for Nuclear Astrophysics – [Physics of Atomic Nuclei High School Program](#)  
*The Age and Chemical Evolution of the Universe from Two Stars in the Milky Way*
- [62.](#) [Regional Center for Space Science and Tec Education for West Asia / Arab Union for Astronomy & Space Science](#)  
*Our eyes in the skies: How telescopes help us place ourselves in the Universe*
- [61.](#) NSF's NOIRLab [Colloquium](#)  
*Near-Field Cosmology with Narrow-Band Photometry and Spectroscopy of Low-Metallicity Stars*
- [60.](#) Universidade de São Paulo – [Astrophysics Colloquium](#)  
*Near-Field Cosmology using Narrow-Band Photometry and Low-Metallicity Stars*

- [59.](#) Universidade de São Paulo – [Astronomia ao Meio-dia](#) (watch it on [Youtube](#) – in Portuguese)  
[Agulhas no palheiro: A evolução química e idade do Universo contadas por duas estrelas](#)

## 2019

- [58.](#) National Optical Astronomy Observatory  
*Stellar Archaeology: Understanding the Chemical Evolution of the Universe through Color Maps of the Night Sky*
- [57.](#) Joint Institute for Nuclear Astrophysics – [Physics of Atomic Nuclei High School Program](#)  
*The Age and Chemical Evolution of the Universe from two stars in the Milky Way*
56. Consejo Superior de Investigaciones Científicas – [17th J-PAS Collaboration Meeting](#)  
[Identification of Low-Metallicity Stars from Narrow-Band Photometry](#)
- [55.](#) San Francisco State University – [Physics & Astronomy Colloquium](#)  
*Stellar Archaeology: Origin of the Chemical Elements in the Universe through a 59-Color Map of the Sky*

## 2018

- [54.](#) Kavli IPMU at The University of Tokyo – [Stellar Archaeology as a Time Machine to the First Stars](#)  
[The Mass Distribution of the First Stars revealed by Abundance Pattern Matching of Ultra Metal-Poor Stars](#)
53. Kavli IPMU at The University of Tokyo – [Introduction to Stellar Archaeology](#)  
[Radioactive Stellar Ages](#)
- [52.](#) Texas A&M University Commerce – [Physics & Astronomy Colloquium](#)  
*Stellar Archaeology: Understanding the Origin of the Chemical Elements through a 59-Color Map of the Night Sky*
- [51.](#) Chungnam National University – [Department of Astronomy & Space Science Seminar](#)  
*The Origin of the Chemical Elements in the Universe revealed by a 12-Color Map of the Night Sky*
- [50.](#) Korea Astronomy and Space Science Institute [Colloquium](#)  
*Constraints on Near-Field Cosmology through Abundance Pattern Matching of Ultra Metal-Poor Stars*
- [49.](#) Universidade de São Paulo – [Astronomy Colloquium](#)  
*The Southern Photometric Local Universe Survey (S-PLUS): An Overview*
48. Universidade de São Paulo – [S-PLUS Meeting](#)  
[Short update on S-PLUS SHORTS](#)
47. University of Notre Dame – [Astronomy 1-minute talks \(23 presenters\)](#)  
*Organizer and Presenter*
- [46.](#) University of Notre Dame – [Our Universe Revealed](#)  
[A day in the life of an Astronomer](#)
45. Kavli Institute for Cosmological Physics – [Near-Field Cosmology with the Dark Energy Survey](#)  
[The Age Structure of the Milky Way Halo revealed by DES](#)
- [44.](#) Joint Institute for Nuclear Astrophysics – [Physics of Atomic Nuclei High School Program](#)  
[Can we talk about the Age and Chemical Evolution of the Universe by looking at only two stars?](#)
43. Centro de Estudios de Física del Cosmos de Aragón – [J-PLUS 2<sup>nd</sup> Virtual Meeting](#)  
[J-PLUS Stellar Parameter Value Added Catalog](#)
- [42.](#) Shanghai Jiao Tong University – [Tsung-Dao Lee Institute Workshop on The Exploding Universe](#)  
[Probing the mass distribution of the first stars through abundance pattern matching of ultra metal-poor stars](#)
- [41.](#) JINA-CEE Frontiers in Nuclear Astrophysics – [Main Conference](#)  
*Observational constraints on the origin of the elements: from First stars to Neutron-Star mergers*
- [40.](#) Manhattan College – [Physics Department Colloquium](#)  
*Understanding the Origin of the Elements in the Universe through a 12-Color Map of the Night Sky*



- [39.](#) *JINA-CEE Frontiers in Nuclear Astrophysics – Junior Workshop Speaking Skills*
- [38.](#) *Centro de Estudios de Física del Cosmos de Aragón – 16th J-PAS Collaboration Meeting - Pathfinder science Constraints on First-Star Nucleosynthesis from J-PAS Photometry of Low-Metallicity Stars*
- [37.](#) *Universidade de São Paulo – S-PLUS Collaboration Meeting (online) Updates on S-PLUS Short Survey(s)*

## 2017

- [36.](#) *Universidade de São Paulo – S-PLUS Collaboration Meeting (online) Updates on S-PLUS Short Survey(s)*
- [35.](#) *Michiana Astronomical Society – MAS monthly meeting speaker A Tale of Two Stars: Revealing the Age and Chemical Evolution of the Universe*
- [34.](#) *University of Notre Dame – Astro-Skills Lunch The do's and don'ts when plotting data*
- [33.](#) *Red de Infraestructuras de Astronomía – Early Data Release and Scientific Exploitation of the J-PLUS Survey Identification of (Bright) Carbon-Enhanced Metal-Poor Stars with J-PLUS Photometry*
- [32.](#) *GMT Community Science Meeting – Chemical Evolution of the Universe A Monte Carlo approach to find the Progenitors of Ultra Metal-Poor Stars (Rapid Poster Talk)*
- [31.](#) *University of Notre Dame – The Great American Eclipse at Notre Dame Co-organizer / Astronomy faculty representative – 3,500 attendees*
- [30.](#) *University of Notre Dame – Research Experiences for Undergraduates (REU) Program A needle in a haystack: What one star can tell us about the age and chemical evolution of the entire Universe*
- [29.](#) *Centro de Estudios de Física del Cosmos de Aragón – J-PLUS 1<sup>st</sup> Virtual Meeting Identifying (Carbon-Enhanced) Metal-Poor Stars from J-PLUS Photometry*
- [28.](#) *Joint Institute for Nuclear Astrophysics – Physics of Atomic Nuclei High School Program Stellar Archaeology: The Age and Chemistry of the Universe revealed by old Stars*
- [27.](#) *Universidade de São Paulo – Astrophysics Colloquium Searching for the Origin of the Elements Using a 12-Color Map of the Night Sky*

## 2016

- [26.](#) *University of Notre Dame – Astrophysics Seminar A Monte Carlo approach to find the Progenitors of Ultra Metal-Poor Stars*
- [25.](#) *University of Notre Dame – Department of Physics Colloquium Searching for the Origin of the Elements Using a 12-Color Map of the Night Sky*
- [24.](#) *University of Notre Dame – Astronomy 1-minute talks (19 presenters) Organizer and Presenter*
- [23.](#) *Universidade de São Paulo – X-PLUS Collaboration Meeting Identifying Bright Carbon-Enhanced Metal-Poor Stars from S-PLUS Photometry*
- [22.](#) *University of Notre Dame – Research Experiences for Undergraduates (REU) Program Near-Field Cosmology with Metal-Poor Stars*
- [21.](#) *University of Notre Dame – Our Universe Revealed A day in the life of an Astronomer*
- [20.](#) *University of Notre Dame – Our Universe Revealed Our eyes in the skies: How telescopes help us place ourselves in the Universe*
- [19.](#) *227th Meeting of the American Astronomical Society Identifying Bright Carbon-Enhanced Metal-Poor Stars in the RAVE Catalog*

## 2015

18. University of Notre Dame – [Our Universe Revealed](#)  
*The stuff we are made of: how do we determine the chemical elements in stars and the Universe?*
17. University of Notre Dame – Astronomy 1-minute talks (15 presenters)  
*Organizer and Presenter*
- [16.](#) Joint Institute for Nuclear Astrophysics / University of Notre Dame – High School On Air Talk  
*Stellar Archaeology: The Age and Chemistry of the Universe revealed by old Stars – YouTube video*
- [15.](#) Michigan State University – JINA-CEE Nuclear Astrophysics Lunch Research Discussions  
*Observing the First Stars through the Atmospheres of Ultra Metal-Poor Stars*
14. Universidade de São Paulo – X-PLUS Collaboration Meeting  
*Identifying Carbon-Enhanced Metal-Poor Stars from S-PLUS Photometry*
- [13.](#) University of Notre Dame – Research Experiences for Undergraduates (REU) Program  
*Galactic Archaeology: The Chemical Evolution and Age of the Universe revealed by old Stars*

## 2014

- [12.](#) University of Notre Dame – [Astronomy Seminar](#)  
*Exploring the history of the Galactic halo with Carbon-Enhanced Metal-Poor stars*
- [11.](#) Massachusetts Institute of Technology – Kavli Institute  
*Exploring the history of the Galactic halo with Carbon-Enhanced Metal-Poor stars*

## 2013

10. National Optical Astronomy Observatory  
*(Carbon Enhanced) metal-poor stars and the chemical evolution of the Universe*
- [9.](#) Gemini Observatory – Northern Operations Center  
*Metal-poor stars as tracers of the chemical evolution of the Galaxy*

## 2012

- [8.](#) Universidade Cruzeiro do Sul - Astronomy Colloquium  
*Search for Carbon-Enhanced Metal-Poor stars in the Halo(es) of the Galaxy*
- [7.](#) Universidade de São Paulo - Astronomy Colloquium  
*Spectroscopy from  $R=300$  to 30000: metal-poor stars and Galactic chemical evolution*
- [6.](#) Universidade de São Paulo - Invitation to Physics: undergraduate weekly seminar  
*Arqueologia Galáctica: a evolução química do universo revelada por estrelas pobres em metais*
5. Universidade de São Paulo - Astronomy at noon: undergraduate weekly seminar  
*Census of the Milky Way*

## 2011

4. Universidade de São Paulo - Chemical Evolution Group Seminar  
*Rediscovering the Dual Halo of the Milky Way via Hierarchical Clustering*
3. Universidade de São Paulo - Astronomy at noon: undergraduate weekly seminar  
*Stellar Archaeology*
2. Universidade de São Paulo - Astronomy Colloquium  
*Making good use of bad weather: finding extremely metal-poor stars in the clouds*
- [1.](#) ESO Headquarters - Santiago - Astronomy Colloquium  
*Searches for Metal-Poor Stars from the Hamburg/ESO Survey using the CH G-band*

## Academic Experience

### Student/Postdoc supervision

#### Postdoctoral level

2022–2023 Felipe de Almeida Fernandes ([Universidade de São Paulo](#) - Visiting Fellow at NSF NOIRLab)

#### Graduate Level

2023– Eduardo Machado Pereira (Observatório Nacional, Brazil - Visiting Student at NSF NOIRLab)  
2019–2022 Carlos Andrés Galarza Arevalo ([Observatório Nacional - Brazil](#))  
2019–2022 Joseph Zepeda (University of Notre Dame)  
2019–2022 Derek Shank (University of Notre Dame)  
2015–2020 Sarah Dietz (University of Notre Dame)  
2015–2020 Dmitrii Gudín (University of Notre Dame)  
2015–2020 Devin Whitten (University of Notre Dame)  
2015–2020 Kaitlin Rasmussen (University of Notre Dame)  
2015–2017 Geoffrey Lentner (University of Notre Dame)  
2010–2016 Rafael Santucci (M.Sc. and Ph.D. - Universidade de São Paulo)

#### Undergraduate Level - University of Notre Dame

2020 Dante Komater (Physics Major)  
2019–2020 Lucas Pinheiro (Engineering Major)  
2019 Shenghua Liu (Physics Major)  
2019 Winter Allen (Arkansas Tech University - REU)  
2019 Yihao Zhou (Shanghai Jiao Tong University - REU)  
2016–2018 Erik Peterson  
2016–2018 David Kalamarides  
2015–2018 Spencer Clark (Glynn Family Honors Program) - [Senior Thesis](#)  
2016–2017 John Roach  
2016–2017 Cristobal Gonzales  
2016–2017 Michael Kurkowski  
2017 Jazmine Jefferson (University of Kansas - REU)  
2017 Derek Shank (Ohio Wesleyan University - DISC/REU) - [video report](#)  
2017 Diego Fernandez (University of Oregon - REU)  
2016 Travis Hodges (Austin Peay State University - DISC/REU)  
2016 Miguel Correa (San Diego State University - REU)  
2015 Siyu He (Xi'an Jiaotong University - REU)  
2012–2014 William Alves (Universidade de São Paulo)  
2008–2010 Rafael Santucci (Universidade de São Paulo)

## Committee Service - University of Notre Dame

- 2019–2020 Undergraduate Research, Department of Physics
- 2016–2018 Graduate Recruitment, Department of Physics
- 2015–2018 Preliminary Exam Committee, Department of Physics
- 2015–2018 University Committee on Research & Sponsored Programs, Notre Dame Research

## Thesis Defense Committee

- 2024 Paulo Cesar Vargas Junior (M.Sc.)  
Universidade Federal de Goiás
- 2024 Guilherme Limberg (Ph.D.)  
Universidade de São Paulo
- 2024 [Franklin T. S. Sampaio](#) (M.Sc.)  
Universidade Federal de Goiás
- 2024 [Fábio Carneiro Wanderley](#) (Ph.D.)  
Observatório Nacional
- 2024 [Elvis William Carvalho Cantelli](#) (Ph.D.)  
Universidade de São Paulo
- 2023 [Yuri Abuchaim de Oliveira](#) (M.Sc.)  
Universidade de São Paulo
- 2023 [Fabricia Oliveira Barbosa](#) (M.Sc.)  
Universidade de São Paulo
- 2018–2022 [Heitor Ernandes](#) (Ph.D. - committee chair)  
Universidade de São Paulo
- 2021 [Raphaela Fernandes de Melo](#) (M.Sc.)  
Observatório Nacional
- 2019 [Henrique Reggiani](#) (Ph.D.)  
Universidade de São Paulo
- 2016 [Rafael Miloni Santucci](#) (Ph.D.)  
Universidade de São Paulo
- 2016 [Camilo Francisco Javier Muñoz Peña](#) (M.Sc.)  
Universidade de São Paulo

## Organizing Committee - Conferences and Workshops

- 2024 [Rare Gems in Big Data](#)  
NSF NOIRLab
- 2022 [DECam at 10 years - Looking Back, Looking Forward](#)  
NSF NOIRLab

## Teaching

**Lead Instructor (LI) / Co-Instructor (CI) / Guest Lecturer (GL)**

### Undergraduate

#### University of Notre Dame

- |      |      |  |
|------|------|--|
| 2020 | (LI) | Descriptive Astronomy (SU20-PHYS-10140)<br>Course Instructor Feedback: 5.0/5.0 - <a href="#">link to full report</a>                 |
|      | (LI) | Descriptive Astronomy (SP20-PHYS-10140)<br>Course Instructor Feedback: 5.0/5.0 - <a href="#">link to full report</a>                 |
|      | (LI) | General Physics B - E & M Laboratory (SP20-PHYS-11422)<br>Course Instructor Feedback: 5.0/5.0 - <a href="#">link to full report</a>  |
|      | (GL) | Engineering Physics II Laboratory (SP20-PHYS-11320)  |
|      | (GL) | Engineering Physics I Laboratory (SP20-PHYS-11310)   |
| 2019 | (LI) | Physics A - Mechanics Laboratory (FA19-PHYS-11411)<br>Course Instructor Feedback: 5.0/5.0 - <a href="#">link to full report</a>      |
|      | (LI) | <a href="#">Descriptive Astronomy</a> (SU19-PHYS-10140)<br>Course Instructor Feedback: 5.0/5.0 - <a href="#">link to full report</a> |
| 2018 | (GL) | Descriptive Astronomy (FA18-PHYS-10140)  |
| 2017 | (CI) | Descriptive Astronomy (FA17-PHYS-10140)  |
|      | (LI) | General Physics B - E & M Laboratory (SP17-PHYS-11422)<br>Course Instructor Feedback: 4.8/5.0 - <a href="#">link to full report</a>  |
| 2016 | (GL) | Descriptive Astronomy (FA16-PHYS-10140)  |
| 2015 | (GL) | Modern Observational Techniques (FA15-PHYS-30481)  |

#### Universidade Virtual do Estado de São Paulo

- |      |      |                                |
|------|------|--------------------------------|
| 2012 | (LI) | Sky and Stars: An introduction |
|      | (LI) | Galaxies: An introduction      |
| 2011 | (LI) | Sky and Stars: An introduction |
|      | (LI) | Galaxies: An introduction      |

### Graduate

#### University of Notre Dame

- |      |      |  |
|------|------|--|
| 2017 | (CI) | Astrophysics: Stars (SP17-PHYS-80202)              |
| 2016 | (CI) | Large-Scale Astronomical Surveys (SP16-PHYS-70210) |
| 2015 | (GL) | Astrophysics: Stars (SP15-PHYS-80202)              |

#### Universidade de São Paulo

- |      |      |                         |
|------|------|-------------------------|
| 2012 | (GL) | Observational Astronomy |
|------|------|-------------------------|

### Teaching Assistant - Universidade de São Paulo

- |      |                           |
|------|---------------------------|
| 2009 | Introduction to Astronomy |
|      | Fundamental Astronomy     |
| 2008 | Introduction to Astronomy |
| 2007 | Fundamental Astronomy     |

## Other relevant information

### Technical skills

Linux/Unix/MACOSX/Windows operating systems  
Shell Scripting (sh, bash, tcsh, zsh)  
L<sup>A</sup>T<sub>E</sub>X, OpenOffice, MS Office. Co-author of the L<sup>A</sup>T<sub>E</sub>Xtemplate [IAGTESE](#)  
Python (iPython/Jupyter Notebooks): scipy, numpy, pandas, scikitlearn, pyfits, astropy  
R-project (terminal/RStudio): FITSio, tidyverse, cluster, sciviews  
Databases: SQL (PostgreSQL/pgAdmin3), SDSS CasJobs, ADQL (J-PLUS/J-PAS/TAPVizieR)  
Web: html, ccs, wordpress, apache, curl, wget, ssh, ftp, drupal, Google Analytics, Matomo  
Graphics: Gnuplot, ggplot2, matplotlib, bokeh, tableau  
Data reduction: IRAF/Pyraf packages, DRAGONS, ESO Reflex/Gasgano  
Astronomy tools: WCSTools, CDSclient, STILTS, SkyCalc  
Documentation: Sphinx, readthedocs  
Version control and DevOps: Git, GitHub, GitLab

### Online Resources

Webpage: <http://vmplacco.github.io/>  
LinkedIn: <https://www.linkedin.com/in/vinicius-placco/>  
GitHub: <https://github.com/vmplacco/>  
stackoverflow: <https://stackoverflow.com/users/5964833/vinicius-placco>  
pythonanywhere: <https://vplacco.pythonanywhere.com/>  
Sample webpages/  
side projects: <http://vmplacco.github.io/#resources>

### Professional Affiliations/Service

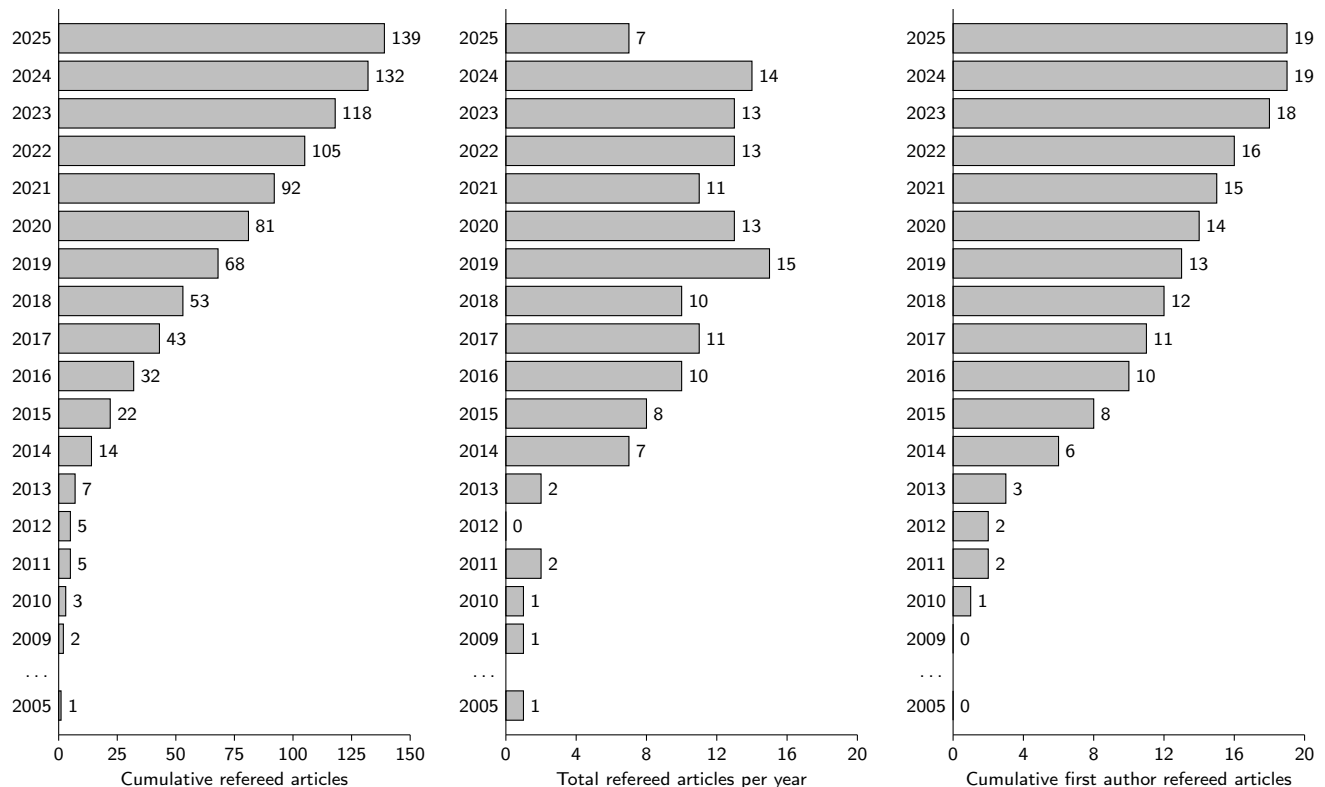
Member of the American Astronomical Society  
Member of the Brazilian Astronomical Society  
Member of the Brazilian Physical Society  
Member of the JINA Center for the Evolution of the Elements

Referee for The Astronomy and Astrophysics Review  
Referee for the American Astronomical Society Journals  
Referee for the AAAS Science Magazine  
Referee for Astronomy & Astrophysics  
Referee for Monthly Notices of the Royal Astronomical Society  
Referee for Astronomy & Computing

## Publication list

### Refereed articles

Total: 139 publications (incl. 19 first, 13 second, 17 third, and 15 fourth author articles)



139. Hirai, Y., Beers, T., Lee, Y. S., Wanajo, S., Roederer, I. U., Tanaka, M., Chiba, M., Saitoh, T., **Placco, V. M.**, Hansen, T. T., Ezzeddine, R., Frebel, A., Holmbeck, E. M., Sakari, C. M.  
*The R-Process Alliance: Enrichment of R-process Elements in a Simulated Milky Way-like Galaxy*  
**2025, The Astrophysical Journal**, in press
138. Aoki, W., Beers, T. C., Honda, S., Matsuno, T., **Placco, V. M.**, Yoon, J., Kuzuhara, M., Harakawa, H., Hirano, T., Kotani, T., Kurokawa, T., Nishikawa, J., Omiya, M., Tamura, M., Vievard, S.  
*Elemental abundances of 44 very metal-poor stars determined from Subaru/IRD near-infrared spectra*  
**2025, Publications of the Astronomical Society of Japan**, in press
137. Bandyopadhyay, A., Ezzeddine, R., **Placco, V. M.**, Frebel, A., Aguado, D. S., Roederer, I. U.  
*Probing Abundance Variations Among Multiple Stellar Populations in the Metal-poor Globular Cluster NGC 2298 Using Gemini-South/GHOST*  
**2025, The Astronomical Journal**, vol. 170, 37 ([ADS](#) |
136. Hansen, T. T., Roederer, I. U., Shah, S., Ezzeddine, R., Beers, T., Frebel, A., Holmbeck, E. M., **Placco, V. M.**, Sakari, C. M., Ji, A. P., Marshall, J. L., Mardini, M. K., Chiti, A.  
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