

# Dr. GISELA NOEMÍ ORTIZ LEÓN

Instituto de Astronomía, Universidad Nacional Autónoma de México

Círculo de la Investigación Científica s/n. CU, Del. Coyoacán. C.P. 04510, CDMX, México

+52 4431467160 | [gortiz@astro.unam.mx](mailto:gortiz@astro.unam.mx) | <https://www3.mpifr-bonn.mpg.de/staff/gortiz>

## PERSONAL INFORMATION

- Date and place of birth: 6 July 1987, Oaxaca, Mexico
- Nationality: Mexican

## RESEARCH INTERESTS

Radio astronomy; centimeter- and millimeter-wave Very Long Baseline Interferometry; high precision astrometry; early stages of star formation; high-energy processes in young stars; multiplicity of young stars; astrophysical masers; searches for substellar companions.

## EDUCATION

Universidad Nacional Autónoma de México (UNAM)

Ph.D. Astrophysics	Dissertation: "Astrometría ultra precisa con interferometría de muy larga base en el centimétrico y milimétrico". Thesis advisor: Laurent Loinard	2017
M.Sc. Astrophysics	GPA: 9.89/10	2012
B.S. Physics	Dissertation: "Emisión variable de radio proveniente de estrellas masivas". Thesis advisor: Luis F. Rodríguez. GPA: 9.81/10	2010

## PROFESSIONAL RECORD

- Postdoctoral researcher, Instituto de Astronomía, Mexico 2021-present
- Guest researcher, Max-Planck-Institut für Radioastronomie, Germany 2021-2024
- Postdoctoral researcher, Max-Planck-Institut für Radioastronomie, Germany 2019-2021
- Alexander von Humboldt Fellow, Max-Planck-Institut für Radioastronomie, Germany 2017-2019
- Doctoral student, Instituto de Radioastronomía y Astrofísica, Mexico 2012-2016
- Visiting student, Max-Planck-Institut für Radioastronomie, Germany 2016  
Host: Prof. Dr. Karl Menten
- Visiting student, MIT Haystack Observatory, USA 2013  
Host: Dr. Sheperd Doeleman
- Master student, Instituto de Radioastronomía y Astrofísica, Mexico 2010-2012
- Associated student, Instituto de Ciencias Nucleares, Mexico 2008-2009  
Host: Dr. José Jiménez Mier y Terán.

## PUBLICATION RECORD

- Refereed papers: 55 (11 as first author)  
Citations: 3169 (407 as first author)  
Hirsch citation index h = 23 (source: Astrophysics Data Service, October, 2021)

## ACADEMIC HONORS, GRANTS, AWARDS AND DISTINCTIONS

- Member (Level I) of the Mexican National System of Researchers (SNI), CONACyT 2021-2024
- 2020 Breakthrough Prize in Fundamental Physics (shared with the Event Horizon Telescope - EHT - Collaboration) 2020
- Best doctoral thesis in Astrophysics in Mexico, 2017-2018 2019
- 2019 Diamond Achievement Award (shared with the EHT Collaboration) 2019
- 2017 "Alfonso Caso" Medal, UNAM 2019
- IAU 2017 PhD Prize, The International Astronomical Union 2018
- Humboldt Research Fellowship for Postdoctoral Researchers 2017
- Honorable Mention, PhD Thesis defense, UNAM 2017
- Scholarship holder, Alexander von Humboldt Foundation 2016
- Ph.D. Grant holder, CONACyT 2012

- Certificate of Distinction awarded to the best three students of Physics, UNAM 2011
- Honorable Mention, B.S. Thesis defense, UNAM 2010
- M.Sc. Grant holder, CONACyT 2010
- 3rd place, National Astronomy Olympiad (B.S. level) 2009
- Finalist, National Astronomy Olympiad (B.S. level) 2008
- High Academic Performance Diploma, UNAM 2006
- UNAM Scholarship Holder 2006-2009
- High Academic Performance Diploma, UNAM 2005

#### **INTERNATIONAL/NATIONAL CONFERENCES, TALKS, COLLOQUIUMS AND WORKSHOPS**

- National Astronomy Meeting, Virtual, Invited Talk Oct 2021
- The Past, Present, and Future of the VLA: Celebrating 40 Years, Virtual, Poster talk Aug 2021
- Event Horizon Telescope 2021 Virtual Collaboration Meeting, LOC co-chair Jun 2021
- Universidad Michoacana de San Nicolás de Hidalgo, Virtual, Invited Talk Jan 2021
- CASA-VLBI workshop, Virtual, participant Nov 2020
- Instituto de Astronomía, Virtual, Colloquium May 2020
- The Scientific Quest for High Angular Resolution, USA, Invited Talk Jan 2020
- Escuela Superior de Física y Matemáticas, Mexico, Colloquium Oct 2019
- Regional VLBI Workshop 2019, Mexico, Invited Talk Feb 2019
- National Physics Meeting, Mexico, Contributed Talk Oct 2018
- Instituto de Astronomía, Mexico, Colloquium Oct 2018
- XXXth General Assembly of the IAU, Austria, Invited Talk Aug 2018
- Bonn-Dwingeloo Neighbourhood VLBI Meeting, Germany, Contributed Talk Jul 2017
- European Week of Astronomy and Space Science, Czech Republic, Contributed Talk Jun 2017
- Event Horizon Telescope 2016 Meeting, USA, Invited Talk Nov 2016
- Instituto de Astronomía, Mexico, Colloquium Oct 2016
- VI Leopoldo García-Colín Mexican Meeting, Mexico, Invited Talk Sep 2016
- National Astronomy Students Meeting, Mexico, Contributed Talk Aug 2016
- The Multi-Messenger Astrophysics of the Galactic Centre, Australia, Contributed Talk Jul 2016
- High Frequency Science Workshop, Green Bank, USA, Contributed Talk Sep 2015
- National Astronomy Students Meeting, Puebla, Mexico, Plenary Talk Aug 2015
- mm-VBLI data processing Workshop, Leiden, The Netherlands, Invited Talk Jun 2015
- Event Horizon Telescope 2014 Meeting, Waterloo, Canada, Poster Nov 2014
- National Physics Meeting, Mazatlán, Mexico, Contributed Talk Oct 2014
- National Astronomy Students Meeting, Guanajuato, Mexico, Contributed Talk Aug 2014
- Protostars and Planets VI, Heidelberg, Germany, Poster Jul 2013
- Meeting of the star-formation community in Mexico, Mexico, Contributed Talk Oct 2012
- Meeting of the star-formation community in Mexico, Mexico, Contributed Talk Jul 2011
- National Astronomy Meeting, Guadalajara, Mexico, Contributed Talk Sep 2011
- 13th Latin-American Regional IAU Meeting, Morelia, Mexico, Contributed Talk Nov 2010
- National Physics Meeting, Veracruz, Mexico, Contributed Talk Oct 2010

#### **PROFESSIONAL SERVICE/INSTITUTIONAL WORK AND MEMBERSHIPS**

- Grant reviewer Postdoctoral fellowships - CONACyT 2021
- Grant reviewer Research projects submitted to Dirección General de Asuntos del Personal Académico - UNAM 2020
- Referee The Astrophysical Journal since 2017
- Examination committee *Norida Jazmín Ordoñez Toro, M.Sc., U. de Guanajuato* 2020
- IAU member Junior Member since 2018
- EHT Collaboration Member since 2017

## PROFESSIONAL REFERENCES

- Dr. Laurent Loinard  
Instituto de Radioastronomía y Astrofísica  
UNAM  
Antigua Carretera a Pátzcuaro #8701 Ex-Had.  
San José de la Huerta, Morelia 58089, México  
Phone: +52 443 322 27 49  
e-mail: [l.loinard@irya.unam.mx](mailto:l.loinard@irya.unam.mx)
- Dr. Luis F. Rodríguez  
Instituto de Radioastronomía y Astrofísica  
UNAM  
Antigua Carretera a Pátzcuaro #8701 Ex-Had.  
San José de la Huerta, Morelia 58089, México  
Phone: +52 443 322 24 42  
e-mail: [l.rodriguez@irya.unam.mx](mailto:l.rodriguez@irya.unam.mx)
- Dr. Sheperd S. Doeleman  
Harvard-Smithsonian Center for Astrophysics  
60 Garden Street, Cambridge, MA 02138, USA  
Phone: 617 496 7762  
e-mail: [sdoeleman@cfa.harvard.edu](mailto:sdoeleman@cfa.harvard.edu)
- Prof. Dr. Karl M. Menten  
Max-Planck-Institut für Radioastronomie  
Auf dem Hügel 69  
53121, Bonn, Germany  
Phone: +49 228 525 471  
e-mail: [kmenten@mpifr-bonn.mpg.de](mailto:kmenten@mpifr-bonn.mpg.de)

## PRESS RELEASES

- "GLOSTAR - tracing atomic and molecular gas in the Milky Way"  
<https://www.mpifr-bonn.mpg.de/pressreleases/2021/9>
- "New Study Reveals Previously Unseen Star Formation in Milky Way"  
<https://public.nrao.edu/news/new-study-star-formation-milky-way/>
- "VLBA Finds Planet Orbiting Small, Cool Star"  
<https://public.nrao.edu/news/vlba-finds-planet/>
- "First radio detection of an extrasolar planetary system around a main-sequence star"  
<https://www.mpifr-bonn.mpg.de/pressreleases/2020/7>
- "Gracias a radiotelescopio mexicano, miden de manera muy precisa la emisión alrededor del agujero negro en el centro de la Vía Láctea"  
<http://www.inaoep.mx/noticias/?noticia=412&anio=2016>
- "New Hydrogen Maser Installed at the Large Millimeter Telescope for High Sensitivity mm-wave Very Long Baseline Interferometry"  
<https://science.nrao.edu/ernews/7.6/index.shtml#fringes>
- "Measuring the Shape of the Milky Way's Black Hole"  
<https://www.cfa.harvard.edu/news/su201625>

## COMPLETE LIST OF PUBLICATIONS

ADS public library: <https://ui.adsabs.harvard.edu/public-libraries/0SNWP0xpRtG9a0seTlbcfg>

Papers with 20 or more (♦), 50 or more (♣) and 100 or more (♠) citations.

### A) Publications with peer review process

1. **Gisela N. Ortiz-León**, Adele Plunkett, (+6 co-authors), 2021 "Discovery of 22 GHz Water Masers in Serpens South", *The Astronomical Journal*, 162, 68.
2. Hans Nguyen, Michael Rugel, (+20 co-authors including **Gisela N. Ortiz-León**), 2021 "A Global View on Star Formation: The GLOSTAR Galactic Plane Survey III. Radio continuum detections of young stellar objects in the Galactic Centre region", *Astronomy & Astrophysics*, 651, 88.
3. **Gisela N. Ortiz-León**, Karl M. Menten, Andreas Brunthaler, (+16 co-authors), 2021 "A Global View on Star Formation: The GLOSTAR Galactic Plane Survey III. 6.7 GHz Methanol maser survey in Cygnus X", *Astronomy & Astrophysics*, 651, 87.
4. Rohit Dokara, Andreas Brunthaler, (+18 co-authors including **Gisela N. Ortiz-León**), 2021 "A Global View on Star Formation: The GLOSTAR Galactic Plane Survey II. Supernova remnants in the first quadrant of the Milky Way", *Astronomy & Astrophysics*, 651, 86.
5. Andreas Brunthaler, Karl M. Menten, (+21 co-authors including **Gisela N. Ortiz-León**), 2021 "A Global View on Star Formation: The GLOSTAR Galactic Plane Survey I. Overview and first results for the Galactic longitude range  $28^\circ < l < 36^\circ$ ", *Astronomy & Astrophysics*, 651, 85.
6. Arshia M. Jacob, Karl M. Menten, Helmut Wiesemeyer, and **Gisela N. Ortiz-León**, 2021 "The CH radical at radio wavelengths: revisiting emission in the 3.3 GHz ground-state lines", *Astronomy & Astrophysics*, 650, 133.
7. David A. Neufeld, Karl M. Menten, Carlos Durán, Rolf Günsten, Michael J. Kaufman, Alex Kraus, Parichay Mazumdar, Gary J. Melnick, **Gisela N. Ortiz-León**, Helmut Wiesemeyer, and Friedrich Wyrowski, 2021 "Terahertz Water Masers: II. Further SOFIA/GREAT Detections toward Circumstellar Outflows, and a Multitransition Analysis", *the Astrophysical Journal*, 907, 42.
8. Salvador Curiel, **Gisela N. Ortiz-León**, Amy J. Mioduszewski, and Rosa M. Torres, 2020 "An Astrometric Planetary Companion Candidate to the M9 Dwarf TVLM 513–46546", *the Astronomical Journal*, 160, 97.
9. **Gisela N. Ortiz-León**, Karl M. Menten, Tomasz Kaminski, Andreas Brunthaler, Mark J. Reid, and Romuald Tylenda, 2020 "SiO maser astrometry of the red transient V838 Monocerotis", *Astronomy & Astrophysics*, 638, 17.
10. Salvador Curiel, **Gisela N. Ortiz-León**, Amy J. Mioduszewski, and Rosa M. Torres, 2019 "Substellar companions of the young weak-line T Tauri Star DoAr21", *the Astrophysical Journal*, 884, 13.
11. Phillip A. B. Galli, Laurent Loinard, H. Bouy, L. M. Sarro, **Gisela N. Ortiz-León**, (+7 co-authors), 2019 "Structure and kinematics of the Taurus star-forming region from Gaia-DR2 and VLBI astrometry", *Astronomy & Astrophysics*, 630, 137. ♦
12. Sac N. X. Medina, James S. Urquhart, Sergio A. Dzib, (+18 co-authors including **Gisela N. Ortiz-León**), 2019 "GLOSTAR - Radio Source Catalog I:  $28^\circ < l < 36^\circ$  and  $|b| < 1^\circ$ ", *Astronomy & Astrophysics*, 672, 175.

13. Christiaan D. Brinkerink, Cornelia Müller, (+22 co-authors including **Gisela N. Ortiz-León**), 2019, "Micro-arcsecond structure of Sagittarius A\* revealed by high-sensitivity 86 GHz VLBI observations", *Astronomy & Astrophysics*, 621, 119.
14. **Gisela N. Ortiz-León**, Laurent Loinard, Sergio A. Dzib (+9 co-authors), 2018, "Gaia-DR2 confirms VLBA parallaxes in Ophiuchus, Serpens and Aquila", *the Astrophysical Journal Letters*, 869L, 33. ♣
15. Sergio A. Dzib, Laurent Loinard, **Gisela N. Ortiz-León**, Luis F. Rodríguez, and Phillip A. B. Galli, 2018, "Distances and Kinematics of Gould Belt Star-forming Regions with Gaia DR2 Results", *the Astrophysical Journal*, 867, 151. ♦
16. **Gisela N. Ortiz-León**, Laurent Loinard, (+11 co-authors), 2018, "The Gould's Belt Distances Survey (GOBELINS). V. Distances and Kinematics of the Perseus molecular cloud", *the Astrophysical Journal*, 865, 73. ♣
17. Sergio A. Dzib, **Gisela N. Ortiz-León**, Antonio Hernández-Gómez, (+6 co-authors), 2018, "A revised distance to IRAS 16293-2422 from VLBA astrometry of associated water masers", *Astronomy & Astrophysics*, 614, 20. ♦
18. Phillip A. B. Galli, Laurent Loinard, **Gisela N. Ortiz-León**, (+13 co-authors), 2018, "The Gould's Belt Distances Survey (GOBELINS). IV. Distance, Depth, and Kinematics of the Taurus Star-forming Region", *the Astrophysical Journal*, 859, 33. ♣
19. Marina Kounkel, Lee Hartmann, Laurent Loinard, Amy J. Mioduszewski, Luis F. Rodríguez, **Gisela N. Ortiz-León**, (+3 co-authors), 2018, "VLBA Observations of Strong Anisotropic Radio Scattering Toward the Orion Nebula", *the Astronomical Journal*, 155, 218.
20. Sergio Dzib, **Gisela N. Ortiz-León**, Laurent Loinard, (+4 co-authors), 2018, "VLBA Determination of the Distance to Nearby Star-forming Regions. VIII. The LkHα 101 Cluster", *the Astrophysical Journal*, 853, 99.
21. **Gisela N. Ortiz-León**, Sergio A. Dzib, (+13 co-authors), 2017, "The Gould's Belt Distances Survey (GOBELINS) III. The distance to the Serpens/Aquila Molecular Complex", *the Astrophysical Journal*, 834, 143. ♣
22. Marina Kounkel, Lee Hartman, Laurent Loinard, **Gisela N. Ortiz-León**, (+11 co-authors), 2017, "The Gould's Belt Distances Survey (GOBELINS) II. Distances and structure towards the Orion Molecular Cloud", *the Astrophysical Journal*, 834, 142. ♣
23. **Gisela N. Ortiz-León**, Laurent Loinard, (+15 co-authors), 2017, "The Gould's Belt Distances Survey (GOBELINS) I. Trigonometric parallax distances and depth of the Ophiuchus complex", *the Astrophysical Journal*, 834, 141. ♣
24. Geoffrey Bower, Laurent Loinard, Sergio Dzib, Phillip Galli, **Gisela N. Ortiz-León**, and Claire Moutou, 2016, "Variable radio emission from the young stellar host of a hot Jupiter", *the Astrophysical Journal*, 830, 107.
25. Christiaan D. Brinkerink, (+21 co-authors including **Gisela N. Ortiz-León**), 2016, "Asymmetric structure in Sgr A\* at 3mm from closure phase measurements with VLBA, GBT and LMT", *Mon. Not. R. Astron. Soc.*, 462, 1382. ♦
26. Sergio A. Dzib, **Gisela N. Ortiz-León**, Laurent Loinard, (+4 co-authors), 2016, "VLBA

determination of the distance to nearby star-forming regions. VII. Monoceros R2", the Astrophysical Journal, 826, 201.

27. **Gisela N. Ortiz-León**, Michael Johnson, (+20 co-authors), 2016, "The Intrinsic Shape of Sagittarius A\* at 3.5-mm Wavelength", the Astrophysical Journal, 824, 40. ♦
28. Gerardo Pech, Laurent Loinard, Amy J. Mioduszewski, Sergio A. Dzib, Luis F. Rodríguez, **Gisela N. Ortiz-León**, (+9 co-authors), 2016 "The Gould's Belt Very Large Array Survey V: The Perseus Region", the Astrophysical Journal, 818, 116.
29. Juana L. Rivera, Laurent Loinard, Sergio A. Dzib, **Gisela N. Ortiz-León**, Luis F. Rodríguez, and Rosa M. Torres 2015, "Internal and Relative Motions of the Taurus and Ophiuchus Star-forming Regions", the Astrophysical Journal, 807, 119. ♦
30. **Gisela N. Ortiz-León**, Laurent Loinard, (+13 co-authors), 2015, "The Gould's Belt Very Large Array Survey. II. The Serpens Region", The Astrophysical Journal, 805, 9.
31. Sergio A. Dzib, Laurent Loinard, Luis F. Rodríguez, Amy J. Mioduszewski, **Gisela N. Ortiz-León**, (+9 co-authors), 2015, "The Gould's Belt Very Large Array Survey. IV. The Taurus-Auriga Complex", the Astrophysical Journal, 801, 91. ♦
32. Luis F. Rodríguez, Luis A. Zapata, Sergio A. Dzib, **Gisela N. Ortiz-León**, Laurent Loinard, Enrique Macías, and Guillem Anglada 2014, "An Ionized Outflow from AB Aur, a Herbig Ae Star with a Transitional Disk", the Astrophysical Journal, 793, 21. ♦
33. Marina Kounkel, Lee Hartmann, Laurent Loinard, Amy J. Mioduszewski, Sergio A. Dzib, **Gisela N. Ortiz-León**, (+8 co-authors) 2014, "The Gould's Belt Very Large Array Survey. III. The Orion Region", the Astrophysical Journal, 790, 49. ♦
34. Mauricio Tapia, (+6 co-authors including **Gisela N. Ortiz-León**), 2014, "Periodic Radio Continuum Emission Associated with the beta Cephei Star V2187 Cyg", Revista Mexicana de Astronomía y Astrofísica, 50, 127.
35. Sergio A. Dzib, Laurent Loinard, Amy J. Mioduszewski, Luis F. Rodríguez, **Gisela N. Ortiz-León**, (+8 co-authors) 2013, "The Gould's Belt Very Large Array Survey. I. The Ophiuchus Complex", the Astrophysical Journal, 775, 63. ♣
36. Sergio A. Dzib, Luis F. Rodríguez, Laurent Loinard, Amy J. Mioduszewski, **Gisela N. Ortiz-León**, and Anabella T. Araudo 2013, "Multi-epoch Very Long Baseline Array Observations of the Compact Wind-collision Region in the Quadruple System Cyg OB2 #5", the Astrophysical Journal, 763, 139D. ♦
37. **Gisela N. Ortiz-León**, Luis F. Rodríguez, and Mauricio Tapia 2012, "Extended Non-Thermal Emission Possibly Associated with Cyg OB2 #5", Revista Mexicana de Astronomía y Astrofísica, 48, 85O.
38. **Gisela N. Ortiz-León**, Laurent Loinard, Luis F. Rodríguez, Amy Mioduszewski, and Sergio A. Dzib 2011, "The non-thermal, time variable radio emission from Cyg OB2 # 5: A wind-collision region", the Astrophysical Journal, 737, 300.

B) Publications with peer review process as member of the Event Horizon Telescope Collaboration

1. Michael Janssen, (+Event Horizon Telescope Collaboration including **Gisela N. Ortiz-León**), 2021

- "Event Horizon Telescope observations of the jet launching and collimation in Centaurus A", Nature Astronomy, 133.
2. Ramesh Narayan, (+Event Horizon Telescope Collaboration including **Gisela N. Ortiz-León**), 2021 "The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole", the Astrophysical Journal, 912, 35.
  3. Prashant Kocherlakota, (+Event Horizon Telescope Collaboration including **Gisela N. Ortiz-León**), 2021 "Constraints on black-hole charges with the 2017 EHT observations of M87\*", Physical Review D, 103, 10.
  4. Juan C. Algaba, (+Event Horizon Telescope Collaboration including **Gisela N. Ortiz-León**), 2021 "Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign", the Astrophysical Journal, 911, 11.
  5. Event Horizon Telescope Collaboration, (239 co-authors including **Gisela N. Ortiz-León**), 2021 "First M87 Event Horizon Telescope Results VII: Polarization of the Ring", the Astrophysical Journal Letters, 910, 13. ♦
  6. Event Horizon Telescope Collaboration, (240 co-authors including **Gisela N. Ortiz-León**), 2021 "First M87 Event Horizon Telescope Results VIII: Magnetic Field Structure Near The Event Horizon", The Astrophysical Journal Letters, 910, 12. ♦
  7. Ciriaco, Goddi, Iván Martí-Vidal, 2021, (+Event Horizon Collaboration co-authors including **Gisela N. Ortiz-León**), "Polarimetric Properties of Event Horizon Telescope Targets from ALMA", the Astrophysical Journal Letters, 910, 14.
  8. Maciek Wielgus, (+218 co-authors including **Gisela N. Ortiz-León**), 2020 "Monitoring the Morphology of M87\* in 2009–2017 with the Event Horizon Telescope", the Astrophysical Journal, 901, 67.
  9. Roman Gold, (+207 co-authors including **Gisela N. Ortiz-León**), 2020 "Verification of Radiative Transfer Schemes for the EHT", the Astrophysical Journal, 897, 148.
  10. Avery E. Broderick, (+193 co-authors including **Gisela N. Ortiz-León**), 2020 "THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope", the Astrophysical Journal, 897, 139.
  11. Jae-Young Kim, (+350 co-authors including **Gisela N. Ortiz-León**), 2020 "Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution", Astronomy & Astrophysics, 640A, 69.
  12. Freek Roelofs, (+208 co-authors including **Gisela N. Ortiz-León**), 2020 "SYMBA: An end-to-end VLBI synthetic data generation pipeline", Astronomy & Astrophysics, 636, 5.
  13. Event Horizon Telescope Collaboration, (217 co-authors including **Gisela N. Ortiz-León**), 2019 "First M87 Event Horizon Telescope Results. III. Data Processing and Calibration", the Astrophysical Journal Letters, 875L, 3. ♠
  14. Event Horizon Telescope Collaboration, (341 co-authors including **Gisela N. Ortiz-León**), 2019, "First M87 Event Horizon Telescope Results. II. Array and Instrumentation", the Astrophysical Journal Letters, 875L, 2. ♠
  15. Event Horizon Telescope Collaboration, (348 co-authors including **Gisela N. Ortiz-León**), 2019,

"First M87 Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole", the Astrophysical Journal Letters, 875L, 1. ♠

16. Vincent L. Fish, (+71 co-authors including **Gisela N. Ortiz-León**), 2016, "Persistent Asymmetric Structure of Sagittarius A\* on Event Horizon Scales", the Astrophysical Journal, 820, 90. ♠
17. Kazunori Akiyama, (+47 co-authors including **Gisela N. Ortiz-León**), 2015, "230 GHz VLBI Observations of M87: Event-horizon-scale Structure during an Enhanced Very-high-energy -Ray State in 2012", the Astrophysical Journal, 807, 150. ♠

C) Book chapters with peer review process

1. Laurent Loinard, (+14 co-authors including **Gisela N. Ortiz-León**), 2015, "SKA tomography of Galactic star-forming regions and spiral arms", Advancing Astrophysics with the Square Kilometre Array (AASKA14), 166.

D) Publications without peer review process

1. Anabella T. Araudo, **Gisela N. Ortiz-León**, and Luis F. Rodríguez 2012, "Gamma-rays from the compact colliding wind region in Cyg OB2 #5", AIP Conference Proceedings, 1505, 422A.