

Luis Henry Quiroga-Nuñez

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❖ Education

PhD. in Astronomy
(2015-)

Leiden University & Joint Institute for VLBI ERIC, Netherlands
Thesis: Galactic structure in terms of AGB stars
Supervisor: *Prof. Dr. H. van Langevelde* (JIVE/Leiden)
Co-Supervisor: *Dr. A. Brown* (Leiden)

MSc. in Astronomy (*cum laude*)
(2013-2015)

Leiden University, Netherlands
Thesis: Distribution of Galactic methanol masers
Advisor: *Prof. Dr. H. van Langevelde* (JIVE/Leiden)
Secondary Project: PCA of HST Images to detect disk structures
Advisor: *Dr. M. Kenworthy* (Leiden)

BSc. in Physics
(2007-2012)

National University of Colombia, Colombia
Thesis: Study of gravitational waves in the precession model of accretion disks
Advisor: *Dr. H. Mosquera Cuesta* (ICRANet, Italy)

❖ Professional Experience

Visiting Research
(5/2017)

University of New Mexico, USA
Advisor: *Prof. Dr. Y. Pihlström*

Visiting Research
(9-10/2015)

National Radio Astronomy Observatory, USA
Advisor: *Dr. L. Sjouwerman*

Summer Internship
(6-9/2013)

Space Telescope Science Institute, USA
Advisor: *Dr. J. Debes*

Summer Internship
(6-9/2012)

ASTRON-JIVE, Netherlands
Advisors: *Dr. G. Surcis*

❖ Observational Experience

ALMA Proposals
(2018)

Co-I: Cycle 6 (Resubmitting), PI: *Pinilla* (U. of Arizona)

VLBA Proposals
(2017)

PI: 17B-16
Co-I: 17B-161, PI: *Pihlström* (UNM)

ESO (VLT) Proposals
(2017)

Co-I: Sphere 2018, PI: *Ginski* (Leiden)

EVN Proposals
(2015-2016)

PI: E16C004 (Resubmitting)
Co-I: E15C016, PI: *Pihlström* (UNM)

HST Proposals
(2014)

Co-I: HST Cycle 22, (Resubmitting), PI: *Soummer* (STScI)

Trainee
(2011)

Tonantzintla Observatory (UNAM & INAOE), Mexico

❖ Teaching Experience

Teaching assistant

(6-12/2017)	<u>High Contrast Imaging</u> Leiden Observatory, Leiden University
(1-6/2017)	<u>Stellar Structure and Evolution</u> Leiden Observatory, Leiden University
(1-6/2011)	<u>Space Flights</u> National University of Colombia, Colombia

Lecturer

(1/2009)	<u>Mathematics and Physics</u> National University of Colombia-Caribbean Campus
(2008)	Gimnasio Campestre La Cumbre, High School, Colombia

❖ Academic Recognition

Honors & Awards

(2015)	Cum Laude Master Degree, Leiden University
(20013)	Mazda Foundation for Arts and Science, Colombia (7k€)
(2009-2012)	Best 15 GPAs Physics Department, National University of Colombia (2k€)

Grants & Scholarships

(2015-2017)	Leids Kerkhoven-Bosscha Fonds, Leiden University (3.5k€)
(2014)	Kapteyn Foundation, University of Groningen (250€)
(2013-2015)	Full Oort Scholarship, Leiden University (58k€)
(2013)	Leiden University Excellence Scholarship (28k€, declined)
(2012-2017)	International Astronomical Union Grants (1.2k€)
(2006)	Mutis Full Scholarship, School of Our Lady of the Rosary University, Colombia (2k€)

❖ Summer Schools, Workshops & Symposia

(9/2017)	IAU Symposium 337, Cagliari, Italy
(7/2017)	IAU Symposium 334, Postdam, Germany
(05-06/2016)	XV Summer School in Astrophysics, Vatican Observatory, Vatican State
(03/2016)	IV Scientific Writing for Young Astronomers, ESO, Chile
(09/2015)	VI European Radio Interferometry School, ESO, Germany
(03/2015)	Saas Fee 2015, Swiss Society for Astrophysics and Astronomy, Switzerland
(08/2012)	Capacity Building Workshop, COSPAR, Argentina
(12/2011)	Data Reduction in Cosmology School, National University of Colombia, Colombia
(11/2011)	XVI Cycle of Special Courses in Astrophysics, National Observatory of Brazil, Brazil
(09/2011)	IV European Radio Interferometry School, National Institute for Astrophysics, Italy
(09/2011)	I Sardinian Summer School in Astrophysics, Cagliari Astronomical Observatory, Italy
(07/2011)	VII Summer School in Astrophysics (IRYA/UNAM), Mexico
(01/2011)	Observational Astronomy School, ESAOBELA, (UNAM/INAOE), Mexico
(12/2010)	X School in Astrophysics, National University of Colombia, Colombia

❖ Selected Contributed and Invited Talks

(11/2017)	Radio Stars, MIT Haystack Observatory, USA
(10/2017)	Astrophysics Brown Bag Lunch Talk, MIT Kavli Institute, USA
(5/2017)	Flash Talk, NOAO, Tucson, Arizona, USA
(4/2017)	IAU Symposium 330, Nice, France
(10/2015)	Bonn-Dwingeloo Neighborhood Meeting 2015, Netherlands
(9/2015)	(invited) Space Telescope Science Institute, USA

(10/2015)	Netherlands Research School for Astronomy 2015, Netherlands
(10/2015)	Lunch Talk Presentation, NRAO, Socorro, USA
(8/2015)	45th Young European Radio Astronomers Conference, Latvia
(2/2015)	(invited) Max Planck Institute for Radioastronomy, Germany
(1/2015)	(invited) Institute of Astronomy, University of Cambridge, UK
(9/2014)	44th Young European Radio Astronomers Conference, Poland
(1/2014)	(remote) 223rd AAS Meeting, USA
(9/2013)	Space Astronomy Summer Program 2013, USA
(8/2012)	Lunch Talk Presentation, ASTRON, Netherlands
(11/2011)	(invited) Distrital University of Colombia, Colombia
(10/2010)	(invited) National University of Colombia, Colombia

❖ Membership of Committees and Working Groups

(2014-)	Scientific Working Group, Planet Formation Imager, PI: <i>S. Krauss</i> (U. Exeter)
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❖ Outreach Work & Press Attention

(12/2017)	SKA Calendar 2017. Featured in “The Bing Bang Theory” TV serie, S11. Ep.10
(3/2016)	Invited Speaker, National Astronomical Observatory, Colombia
(5/2013)	Newspaper interview, Planetarium of Bogota, Colombia
(3/2013)	TV interview, Canal Capital, Colombia
(8/2013)	Invited Speaker, Planetarium of Bogota, Colombia
(1-6/2013)	Coordinator of Academic Activities, Planetarium of Bogota, Bogota, Colombia

❖ Service

(06/2017)	Lecturer for “Chasing planets with Python”, Science Clubs Program COLCIENCIAS & National University of Colombia, Colombia
(03/2013)	Chair in Cycle of Astronomy Conferences Planetarium of Bogota, Colombia

❖ Computational Skills

Programming	Python, IDL, Matlab, C++, Mathematica, SQL
Operating Systems	Linux (Fedora), Mac OSX, Windows
Data processing	AIPS, CASA, Pyraf, ADQL, TOPCAT, DS9, Aladin, Vizier, SPSS IBM
Text editing	LATEX, emacs, iWork Applications, Microsoft Applications

❖ Languages

Spanish: Native	English: Fluent	Dutch: Beginner
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Publication List

❖ Refereed Journal Publications

1. **Quiroga-Nuñez L.H.**, Debes J., and Kenworthy M. Inspecting the Fan on solar system scales with STIS, *in prep* (2017)
 2. Pinilla P., **Quiroga-Nuñez L.H.**, Benisty M., Natta A., Ricci L., Henning T., van der Plas, G., Birnstiel T., Testi L. and Ward-Duong K. Millimeter spectral indices and dust trapping by planets in brown dwarf disks. *ApJ* 846, 70 (2017)
 3. **Quiroga-Nuñez L.H.**, van Langevelde H.J., Reid M. and Green J.A. Galactic methanol maser distribution to constrain Milky Way parameters. *A&A* 604, A72 (2017)
 4. Pinilla P., Benisty M., Birnstiel T., Ricci L., Isella A., Natta A., Dullemond C.P., **Quiroga-Nuñez L.H.**, Henning T. and Testi L., Millimetre spectral indices of transition disks and their relation with the cavity radius. *A&A* 564, A51 (2014)
 5. Surcis G., Vlemmings W.H.T., van Langevelde H.J., Hutawarakorn Kramer B. and **Quiroga-Nuñez L.H.**, EVN observations of 6.7 GHz methanol maser polarization in massive star-forming regions II: First statistical results. *A&A* 556, A73 (2013)
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❖ Conference Proceedings & Other Publications

1. **Quiroga-Nuñez, L.H.**, van Langevelde, H. J., Sjouwerman, L. O., Pihlström, Y. M., Reid, M. J., Brown, A. G. A. & Green, J. A. Maser, infrared and optical emission for late-type stars in the Galactic plane. *IAU Proceedings* 334 (submitted) (2017)
2. **Quiroga-Nuñez, L.H.**, van Langevelde, H. J., Reid, M. J., Sjouwerman, L. O., Pihlström, Y. M., Brown, A. G. A. & Green, J. A. Astrometric Galactic maser measurements cross-matched with Gaia. *IAU Proceedings* 332 (in press) (2017)
3. **Quiroga-Nuñez, L.H.**, van Langevelde, H. J., Pihlström, Y. M., Sjouwerman, L. O. & Brown, A. G. A. Finding evolved stars in the inner Galactic disk with Gaia. *IAU Proceedings* 330 (in press) (2017)
4. Kraus, S., Monnier, J., Ireland, Michael J., et al. (including **Quiroga-Nuñez L.H.**) Planet Formation Imager: science vision and key requirements. *SPIE Proceedings*, 99071K (2016)
5. Surcis G., Vlemmings W.H.T., van Langevelde H.J., Hutawarakorn Kramer B. and **Quiroga-Nuñez L.H.**, A correlation between magnetic field orientation and molecular outflow in massive young stellar objects. *European VLBI Network Newsletter* 36 (2013)
6. Mosquera H. J., Sánchez L. A., Pardo D. A., Caproni A., Abraham Z. and **Quiroga-Nuñez, L.H.**, Gravitational Waves from Ejection of Jet Superluminal Components and Precession of Accretion Disks Dynamically Driven by Bardeen-Petterson Effect. *IJMP:CS* 3, 482 (2011)