



UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type A post-doc fellowship

[Andres Felipe Izquierdo Cartagena]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Izquierdo Cartagena
Name	Andres Felipe
Date of birth	[19, 01, 1996]

PRESENT OCCUPATION

Appointment	Structure
PhD Student	Astrophysics

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Astronomy	Universidad de Antioquia	2018
Specialization			
PhD	Astrophysics	ESO Garching - Leiden University	2023 (expected)
Master	Astronomy and Astrophysics	University of Manchester	2019
Degree of medical specialization			
Degree of European specialization			
Other			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS



Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
Spanish	Native
English	C1

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2018	UK Newton Fund scholarship (£14,533 GBP + tuition fee) to pursue master's studies at the University of Manchester.
2018	Award <i>Medellin Investiga</i> to "outstanding researchers for their contribution to innovative scientific work in the city of Medellin" (US\$5000).
2018	Award and Honorable mention <i>Premio a la Investigación, Universidad de Antioquia</i> for "the best BSc. thesis" (US\$1200).
2013 - 2018	Awarded ten times for "the highest GPA of the bachelor's degree in Astronomy per semester" (waived tuition fees, US\$500 per semester).
2016 - 2017	Research Fund to carry out laboratory work on the design and characterisation of optical vortex coronagraphs. (US\$1000 per year).
2015	Distinction to the high academic performance at the Facultad de Ciencias Exactas de la Universidad de Antioquia (US\$300).

TRAINING OR RESEARCH ACTIVITY

2021. Co-advisor of Bachelor student Elena M. Viscardi (University of Milan). Thesis: Measuring the mass of the disc of WaOph6 with DiSCMiNER. Summa cum laude.
2020. Co-advisor of Master student Pietro Curone (University of Milan). Thesis: A giant planet shaping the disk around the very low-mass star CIDA 1. (A&A paper)
2017. Lecturer of the course Computational techniques for physical sciences. This course was aimed at bachelor students of Physics and Astronomy at the University of Antioquia.
2016-2017. Laboratory assistant in the optics and photonics group (Universidad de Antioquia). Design and characterisation of optical vortex coronagraphs for astronomical instruments.
2013-2014. Assistant instructor of the General Astronomy course. This course was aimed at students of the major in Astronomy at the University of Antioquia.



PROJECT ACTIVITY

Year	Project

PATENTS

Patent

CONGRESSES AND SEMINARS

Date, Title. Place
<ul style="list-style-type: none">• Dec 2022, Seminar. SMA Science Seminar at CfA. Cambridge, US.• Nov 2022, Contributed Talk. Disks and Planets at ESO. Munich, Germany.• Nov 2022, Seminar. UF Stars and Planets Seminar. Florida, US.• Sep 2022, Colloquium. IRyA Astronomy Colloquium. Morelia, Mexico.• Jun 2022, Seminar. Astrobigné at the Arcetri Observatory. Arcetri, Italy.• May 2022, Seminar. Dustbusters summer school. Milan, Italy.• Apr 2022, Seminar. MPIA Planet formation group meeting. Heidelberg, Germany.• Jan 2022, Seminar. MPE-CAS journal club on star and planet formation. Munich, Germany.• Oct 2021, Contributed talk. MIAPP: Structure formation in planet-forming disks. Munich, Germany.• Jun 2021, Seminar. Star and planet formation group meeting. Universidad de Chile.• May 2021, Contributed talk. Core2disk: From prestellar cores to solar nebulae II. Paris, France.• Mar 2021, Invited talk. ECOGAL Post-processing workshop. Paris, France.• Feb 2021, Seminar. ECOGAL seminar series. Heidelberg, Germany.• Oct 2020, Contributed talk. Research Unit: Transition Disks Conference. Munich, Germany.• Jun 2019, Poster. Zooming in on Star Formation. Nafplio, Greece.• May 2019, Seminar. Sun, Stars and Galaxies group seminar series. Manchester, UK.• Feb 2019, Invited talk. Radio Astronomy for Development in the Americas. Medellin, Colombia.• Nov 2018, Invited talk. JBCA Symposium. Manchester, UK.• Jun 2018, Seminar. Seminario del Grupo de Astrofísica Computacional. Medellin, Colombia.• Mar 2018, Contributed talk. Walking the Line. Arizona, US.• Jun 2017, Contributed talk. Taller de Radioastronomía TNT. Puebla, Mexico.• Aug 2016, Contributed talk. The LEAPS Symposium. Leiden, Netherlands.• Nov 2015, Contributed talk. VI School on Cosmic Rays and Astrophysics. Tuxtla Gutiérrez, Mexico.• Aug 2015, Contributed talk. ENO-CANCOA 2015. Cali, Colombia.



PUBLICATIONS

Articles in journals
5. The Disc Miner II: Revealing gas substructure and kinematic signatures of planet-disc interaction through line profile analysis. Izquierdo, A. F., Testi, L. et al., 2023. A&A, submitted.
4. A new planet candidate detected in a dust gap of the disc around HD 163296 through localised kinematic signatures. An observational validation of the Discminer. Izquierdo, A. F., Facchini, S. et al., 2022. ApJ.
3. The Disc Miner I: A statistical framework to detect and quantify kinematical perturbations driven by young planets in discs. Izquierdo, A. F., Testi, L. et al., 2021. A&A.
2. The Cloud Factory II: Gravoturbulent Kinematics of Resolved Molecular Clouds in a Galactic Potential. Izquierdo, A. F., Smith, R. J. et al., 2021. MNRAS.
1. Radiative transfer modelling of W33A MM1: 3D structure and dynamics of a complex massive star-forming region. Izquierdo, A. F., Galván-Madrid, R. et al., 2018. MNRAS.
0. Refereed software: SF3DMODELS, PCAFACTORY, DiSCMiNER. Izquierdo, A. F. et al., 2018-2022.
4. A kinematically detected planet candidate in a transition disk. Stadler, J., Benisty, M., Izquierdo, A. F. et al. 2023. A&A Letters in press.
3. Clustered Formation of Very Massive Stars within an Ionized Rotating Disk. Galván-Madrid, R., Zhang, Q., Izquierdo, A. F. et al. 2023. ApJ Letters.
2. A giant planet shaping the disk around the very low-mass star CIDA 1. Curone, P., Izquierdo, A. F. et al. 2022. A&A.
1. On the Effects of Self-obscuration in the (Sub)Millimeter Spectral Indices and the Appearance of Protostellar Disks. Galván-Madrid, R., Liu, H. B., Izquierdo, A. F. et al. 2018. ApJ.
Note: Only listed here are first-author and second/third author papers with major contributions.

OTHER INFORMATION

List of referees:
Prof. Leonardo Testi - leonardo.testi@unibo.it
Prof. Ewine van Dishoeck - ewine@strw.leidenuniv.nl
Prof. Stefano Facchini - stefano.facchini@unimi.it



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Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: ____Leiden____, __January 16th 2023__

SIGNATURE

ANDRÉS F. IZQUIERDO