



## **AINA PALAU PUIGVERT**

### **Datos Generales**

**Nombre:** AINA PALAU PUIGVERT

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 10 años

---

### **Nombramientos**

**Vigente:** INVESTIGADOR TITULAR B TC Definitivo  
Instituto de Radioastronomía y Astrofísica  
Desde 01-12-2022

---

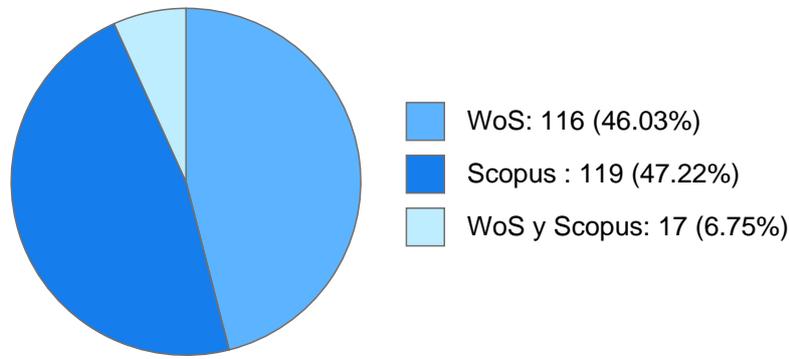
### **Estímulos, programas, premios y reconocimientos**

SNI III 2024 - VIGENTE  
SNI II 2019 - 2023  
SNI I 2016 - 2018  
PRIDE C 2020 - 2024  
EQUIVALENCIA PRIDE B 2015 - 2019

## AINA PALAU PUIGVERT

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



#	Título	Autores	Revista	Año
1	ngVLA Synthetic Observations of Ionized Gas in Massive Protostars	JESUS MIGUEL JAQUEZ DOMINGUEZ ROBERTO JOSE GALVAN MADRID CARLOS EUGENIO CARRASCO GONZALEZ et al.	ASTROPHYSICAL JOURNAL	2025
2	The arc-shaped radio source at the centre of NGC 6334A: is it a colliding wind region of two young massive stars or the bow shock of a runaway star?	AINA PALAU PUIGVERT LUIS FELIPE DE JESUS RODRIGUEZ JORGE JOSEP MARIA MASQUE SAUMELL et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2025
3	Hints of Disk Substructure in the First Brown Dwarf with a Dynamical Mass Constraint	AINA PALAU PUIGVERT Santamaría-Miranda A. Curone P. et al.	ASTROPHYSICAL JOURNAL LETTERS	2025
4	Interstellar complex organic molecules towards outflows from the G351.16+0.70 (NGC 6334 V) massive protostellar system	AINA PALAU PUIGVERT STANLEY EUGENE KURTZ SMITH Rojas-García O.S. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
5	The ALMA-QUARKS Survey: Detection of Two Extremely Dense Substructures in a Massive Prestellar Core	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL LETTERS	2024

## AINA PALAU PUIGVERT

6	Can radial temperature profiles be inferred using NH <sub>3</sub> (1, 1) and (2, 2) observations?	AINA PALAU PUIGVERT Estalella R. Busquet G.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
7	Density distributions, magnetic field structures, and fragmentation in high-mass star formation	AINA PALAU PUIGVERT Beuther H. Gieser C. et al.	ASTRONOMY & ASTROPHYSICS	2024
8	The ALMA Survey of Star Formation and Evolution in Massive Protoclusters with Blue Profiles (ASSEMBLE): Core Growth, Cluster Contraction, and Primordial Mass Segregation	AINA PALAU PUIGVERT GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI et al.	ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES	2024
9	Radio survey of the stellar population in the infrared dark cloud G14.225-0.506	AINA PALAU PUIGVERT Díaz-Márquez E. Grau R. et al.	ASTRONOMY & ASTROPHYSICS	2024
10	Gravity or turbulence? - VI. The physics behind the Kennicutt-Schmidt relation	JAVIER BALLESTEROS PAREDES CARLOS GERARDO ROMAN ZUÑIGA AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
11	ATOMS: ALMA three-millimetre observations of massive star-forming regions? XVII. High-mass star-formation through a large-scale collapse in IRAS 15394-5358	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2024
12	Observations of pre- and proto-brown dwarfs in nearby clouds: Paving the way to further constraining theories of brown dwarf formation	AINA PALAU PUIGVERT Nuria Huelamo David Barrado et al.	NEW ASTRONOMY REVIEWS	2024
13	The kinetic and magnetic energy budget of hub-filament systems during the gravitational fragmentation of molecular clouds	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT Camacho V. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2023
14	Direct Observational Evidence of the Multi-scale, Dynamical Mass Accretion Toward a High-mass Star-forming Hub-filament System	ENRIQUE CRISTIAN VAZQUEZ SEMADENI GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL	2023
15	The effect of tidal forces on the Jeans instability criterion in star-forming regions	JAVIER BALLESTEROS PAREDES ADRIANA GAZOL PATIÑO AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2023

## AINA PALAU PUIGVERT

16	Kinematics and stability of high-mass protostellar disk candidates at sub-arcsecond resolution	ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT Ahmadi A. et al.	ASTRONOMY & ASTROPHYSICS	2023
17	ALMA Observations of NGC 6334S. II. Subsonic and Transonic Narrow Filaments in a High-mass Star Formation Cloud	AINA PALAU PUIGVERT Shanghuo Li Patricio Sanhueza et al.	ASTROPHYSICAL JOURNAL	2022
18	Different molecular filament widths as tracers of accretion on to filaments	GILBERTO CARLOS GOMEZ REYES AINA PALAU PUIGVERT Catherine Walsh	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2022
19	Interstellar Complex Organic Molecules in SiO-traced Massive Outflows	AINA PALAU PUIGVERT STANLEY EUGENE KURTZ SMITH O. S. Rojas-Garcia et al.	ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES	2022
20	ALMA observations of the early stages of substellar formation in the Lupus 1 and 3 molecular clouds	AINA PALAU PUIGVERT A. Santamaria-Miranda I. de Gregorio-Monsalvo et al.	ASTRONOMY & ASTROPHYSICS	2021
21	Multi-scale view of star formation in IRAS 21078+5211: from clump fragmentation to disk wind	ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT L. Moscadelli et al.	ASTRONOMY & ASTROPHYSICS	2021
22	Physical and chemical structure of high-mass star-forming regions Unraveling chemical complexity with CORE: the NOEMA large program	ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT Gieser C. et al.	ASTRONOMY & ASTROPHYSICS	2021
23	Density profile evolution during prestellar core collapse: collapse starts at the large scale	GILBERTO CARLOS GOMEZ REYES ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2021
24	A Low-mass Cold and Quiescent Core Population in a Massive Star Protocluster	AINA PALAU PUIGVERT Shanghuo Li Xing Lu et al.	ASTROPHYSICAL JOURNAL LETTERS	2021
25	Does the Magnetic Field Suppress Fragmentation in Massive Dense Cores?	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ Qizhou Zhang et al.	ASTROPHYSICAL JOURNAL	2021
26	Fragmentation and kinematics in high-mass star formation CORE-extension targeting two very young high-mass star-forming regions	JAVIER BALLESTEROS PAREDES AINA PALAU PUIGVERT H. Beuther et al.	ASTRONOMY & ASTROPHYSICS	2021

## AINA PALAU PUIGVERT

27	A Low-mass Cold and Quiescent Core Population in a Massive Star Protocluster (vol 912, L7, 2021)	AINA PALAU PUIGVERT Shanghuo Li Xing Lu et al.	ASTROPHYSICAL JOURNAL LETTERS	2021
28	Disk fragmentation in high-mass star formation High-resolution observations towards AFGL 2591-VLA 3	AINA PALAU PUIGVERT S. Suri H. Beuther et al.	ASTRONOMY & ASTROPHYSICS	2021
29	W51 North: A protocluster emerging out of a thermally inhibited fragmenting cloud	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ Mengyao Tang et al.	ASTRONOMY & ASTROPHYSICS	2021
30	Clustered star formation at early evolutionary stages Physical and chemical analysis of the young star-forming regions ISOSS J22478+6357 and ISOSS J23053+5953	AINA PALAU PUIGVERT ROBERTO JOSE GALVAN MADRID C. Gieser et al.	ASTRONOMY & ASTROPHYSICS	2021
31	From clump to disc scales in W3 IRS4 A case study of the IRAM NOEMA large programme CORE	AINA PALAU PUIGVERT J. C. Mottram H. Beuther et al.	ASTRONOMY & ASTROPHYSICS	2020
32	Tidal Interaction between the UX Tauri A/C Disk System Revealed by ALMA	LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL	2020
33	ALMA Observations of NGC 6334S. I. Forming Massive Stars and Clusters in Subsonic and Transonic Filamentary Clouds	AINA PALAU PUIGVERT Shanghuo Li Qizhou Zhang et al.	ASTROPHYSICAL JOURNAL	2020
34	Confirming the Explosive Outflow in G5.89 with ALMA	LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL LETTERS	2020
35	Simultaneous Evolution of the Virial Parameter and Star Formation Rate in Molecular Clumps Undergoing Global Hierarchical Collapse	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT Vianey Camacho et al.	ASTROPHYSICAL JOURNAL	2020
36	Multiwavelength modelling of the circumstellar environment of the massive protostar AFGL 2591 VLA 3	AINA PALAU PUIGVERT F. A. Olguin M. G. Hoare et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2020
37	Role of the magnetic field in the fragmentation process: the case of G14.225-0.506	AINA PALAU PUIGVERT N. Anez-Lopez G. Busquet et al.	ASTRONOMY & ASTROPHYSICS	2020
38	VLA ammonia observations of L1287: Analysis of the Guitar core and two filaments	AINA PALAU PUIGVERT LUIS FELIPE DE JESUS RODRIGUEZ JORGE Inma Sepulveda et al.	ASTRONOMY & ASTROPHYSICS	2020

## AINA PALAU PUIGVERT

39	Erratum: Gravity or turbulence? - IV. Collapsing cores in out of virial disguise (Monthly Notices of the Royal Astronomical Society (2018) 479 (2112) DOI: 10.1093/mnras/sty1515)	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT Klessen R.S. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
40	Extreme fragmentation and complex kinematics at the center of the L1287 cloud	AINA PALAU PUIGVERT ROBERTO JOSE GALVAN MADRID Juárez C. et al.	ASTRONOMY & ASTROPHYSICS	2019
41	An Asymmetric Keplerian Disk Surrounding the O-type Protostar IRAS 16547-4247	LUIS ALBERTO ZAPATA GONZALEZ AINA PALAU PUIGVERT LUIS FELIPE DE JESUS RODRIGUEZ JORGE et al.	ASTROPHYSICAL JOURNAL	2019
42	Filamentary Accretion Flows in the Infrared Dark Cloud G14.225-0.506 Revealed by ALMA	AINA PALAU PUIGVERT Huei-Ru Vivien Chen Qizhou Zhang et al.	ASTROPHYSICAL JOURNAL	2019
43	IRAS 23385+6053: an embedded massive cluster in the making	ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT R. Cesaroni et al.	ASTRONOMY & ASTROPHYSICS	2019
44	G5.89: An explosive outflow powered by a proto-stellar merger?	LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
45	Fragmentation, rotation, and outflows in the high-mass star-forming region IRAS 23033+5951: A case study of the IRAM NOEMA large program CORE	AINA PALAU PUIGVERT Bosco F. Beuther H. et al.	ASTRONOMY & ASTROPHYSICS	2019
46	Not so different after all: properties and spatial structure of column density peaks in the pipe and Orion A clouds	CARLOS GERARDO ROMAN ZUÑIGA AINA PALAU PUIGVERT Emilio Alfaro et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
47	Chemical complexity in high-mass star formation An observational and modeling case study of the AFGL2591 VLA3 hot core	AINA PALAU PUIGVERT ROBERTO JOSE GALVAN MADRID C. Gieser et al.	ASTRONOMY & ASTROPHYSICS	2019
48	Global hierarchical collapse in molecular clouds. Towards a comprehensive scenario	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT JAVIER BALLESTEROS PAREDES et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2019
49	Thermal Jeans Fragmentation within ~1000 au in OMC-1S	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ CARLOS GERARDO ROMAN ZUÑIGA et al.	ASTROPHYSICAL JOURNAL	2018

## AINA PALAU PUIGVERT

50	A 1.3 mm SMA survey of 29 variable young stellar objects	CARLOS EUGENIO CARRASCO GONZALEZ ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT et al.	ASTRONOMY & ASTROPHYSICS	2018
51	Early phases in the stellar and substellar formation and evolution: Infrared and submillimeter data in the Barnard 30 dark cloud	AINA PALAU PUIGVERT D. Barrado I. de Gregorio Monsalvo et al.	ASTRONOMY & ASTROPHYSICS	2018
52	Gravity or turbulence? - IV. Collapsing cores in out-of-virial disguise	JAVIER BALLESTEROS PAREDES ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2018
53	Fragmentation and disk formation during high-mass star formation: IRAM NOEMA (Northern Extended Millimeter Array) large program CORE	AINA PALAU PUIGVERT ROBERTO JOSE GALVAN MADRID H. Beuther et al.	ASTRONOMY & ASTROPHYSICS	2018
54	Search for high-mass protostars with ALMA revealed up to kilo-parsec scales (SPARKS): I. Indication for a centrifugal barrier in the environment of a single high-mass envelope	AINA PALAU PUIGVERT T. Csengeri S. Bontemps et al.	ASTRONOMY & ASTROPHYSICS	2018
55	Core fragmentation and Toomre stability analysis of W3(H <sub>2</sub> O): A case study of the IRAM NOEMA large program CORE	ROBERTO JOSE GALVAN MADRID AINA PALAU PUIGVERT A. Ahmadi et al.	ASTRONOMY & ASTROPHYSICS	2018
56	Magnetized Converging Flows toward the Hot Core in the Intermediate/High-mass Star-forming Region NGC 6334 V	AINA PALAU PUIGVERT JAVIER BALLESTEROS PAREDES Juarez, Carmen et al.	ASTROPHYSICAL JOURNAL	2017
57	3.3 CM JVLA OBSERVATIONS OF TRANSITIONAL DISKS: SEARCHING FOR CENTIMETER PEBBLES	LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT Zapata, L.A.	ASTROPHYSICAL JOURNAL	2017
58	A search for pre- and proto-brown dwarfs in the dark cloud Barnard 30 with ALMA	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ Huélamo, N. et al.	ASTRONOMY & ASTROPHYSICS	2017
59	A correlation between chemistry, polarization, and dust properties in the Pipe nebula starless core FeSt 1-457	AINA PALAU PUIGVERT Juárez, C. Girart, J.M. et al.	ASTRONOMY & ASTROPHYSICS	2017
60	ALMA survey of massive cluster progenitors from ATLASGAL Limited fragmentation at the early evolutionary stage of massive clumps	AINA PALAU PUIGVERT Csengeri, T. Bontemps, S. et al.	ASTRONOMY & ASTROPHYSICS	2017

## AINA PALAU PUIGVERT

61	Complex organic molecules tracing shocks along the outflow cavity in the high-mass protostar IRAS 20126+4104	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ Walsh, Catherine et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2017
62	JVLA Observations of Young Brown Dwarfs	LUIS FELIPE DE JESUS RODRIGUEZ JORGE LUIS ALBERTO ZAPATA GONZALEZ AINA PALAU PUIGVERT	ASTRONOMICAL JOURNAL	2017
63	A Search for Water Maser Emission from Brown Dwarfs and Low-luminosity Young Stellar Objects	AINA PALAU PUIGVERT Gomez, Jose F. Uscanga, Lucero et al.	ASTRONOMICAL JOURNAL	2017
64	Molecular Outflows: Explosive versus Protostellar	LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL	2017
65	HOW STARS INTERACT WITH THEIR LOCAL ENVIRONMENT IN CYGNUS-X	CARLOS GERARDO ROMAN ZUÑIGA ELENA JIMENEZ BAILON LUIS ALBERTO ZAPATA GONZALEZ et al.	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2017
66	WHAT IS CONTROLLING THE FRAGMENTATION IN THE INFRARED DARK CLOUD G14.225-0.506?: DIFFERENT LEVELS OF FRAGMENTATION IN TWIN HUBS	AINA PALAU PUIGVERT Busquet, Gemma Estalella, Robert et al.	ASTROPHYSICAL JOURNAL	2016
67	PHOSPHORUS-BEARING MOLECULES IN MASSIVE DENSE CORES	AINA PALAU PUIGVERT Fontani, F. Rivilla, V. M. et al.	ASTROPHYSICAL JOURNAL LETTERS	2016
68	The first Galaxy scale hunt for the youngest high-mass protostars	AINA PALAU PUIGVERT Csengeri, T. Bontemps, S. et al.	Eas Publications Series	2016
69	Ongoing star formation in the protocluster IRAS 22134+5834	AINA PALAU PUIGVERT Wang Y. Audard M. et al.	ASTRONOMY & ASTROPHYSICS	2016
70	Mid-J CO shock tracing observations of infrared dark clouds II. Low-J CO constraints on excitation, depletion, and kinematics	AINA PALAU PUIGVERT Pon A. Johnstone D. et al.	ASTRONOMY & ASTROPHYSICS	2016
71	Resolving the chemical substructure of Orion-KL (vol 581, A71, 2015)	AINA PALAU PUIGVERT Feng S. Beuther H. et al.	ASTRONOMY & ASTROPHYSICS	2016
72	A submillimetre search for pre- and proto-brown dwarfs in Chamaeleon II	AINA PALAU PUIGVERT Eiroa C. Merín B. et al.	ASTRONOMY & ASTROPHYSICS	2016
73	MID-J CO SHOCK TRACING OBSERVATIONS OF INFRARED DARK CLOUDS. III. SLED FITTING	AINA PALAU PUIGVERT Pon, A. Kaufman, M. J. et al.	ASTROPHYSICAL JOURNAL	2016

## AINA PALAU PUIGVERT

74	DENSE CORE PROPERTIES IN THE INFRARED DARK CLOUD G14.225-0.506 REVEALED BY ALMA	AINA PALAU PUIGVERT Ohashi, Satoshi Sanhueza, Patricio et al.	ASTROPHYSICAL JOURNAL	2016
75	Deuteration and evolution in the massive star formation process: The role of surface chemistry	AINA PALAU PUIGVERT Fontani, F. Busquet, G. et al.	ASTRONOMY & ASTROPHYSICS	2015
76	ALMA reveals a candidate hot and compact disc around the O-type protostar IRAS 16547-4247	LUIS ALBERTO ZAPATA GONZALEZ AINA PALAU PUIGVERT ROBERTO JOSE GALVAN MADRID et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015
77	PRE- AND POST-BURST RADIO OBSERVATIONS OF THE CLASS 0 PROTOSTAR HOPS 383 IN ORION	ROBERTO JOSE GALVAN MADRID LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT et al.	ASTROPHYSICAL JOURNAL LETTERS	2015
78	A search for water maser emission toward obscured post-AGB star and planetary nebula candidates	AINA PALAU PUIGVERT Gomez, J. F. Rizzo, J. R. et al.	ASTRONOMY & ASTROPHYSICS	2015
79	FIRST MEASUREMENTS of $^{15}\text{N}$ FRACTIONATION in $\text{N}_2\text{H}^+$ TOWARD HIGH-MASS STAR-FORMING CORES	AINA PALAU PUIGVERT Fontani, F. Caselli, P. et al.	ASTROPHYSICAL JOURNAL LETTERS	2015
80	FIRST DETECTION OF THERMAL RADIOJETS IN A SAMPLE OF PROTO-BROWN DWARF CANDIDATES	AINA PALAU PUIGVERT RICARDO FRANCISCO GONZALEZ DOMINGUEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE et al.	ASTROPHYSICAL JOURNAL	2015
81	Resolving the chemical substructure of Orion-KL	AINA PALAU PUIGVERT Feng, S. Beuther, H. et al.	ASTRONOMY & ASTROPHYSICS	2015
82	Gravity or turbulence? - III. Evidence of pure thermal Jeans fragmentation at $\sim 0.1$ pc scale	AINA PALAU PUIGVERT JAVIER BALLESTEROS PAREDES SanchezMonge, Alvaro et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2015
83	Origin and kinematics of the eruptive flow from XZ Tau revealed by ALMA	LUIS ALBERTO ZAPATA GONZALEZ ROBERTO JOSE GALVAN MADRID CARLOS EUGENIO CARRASCO GONZALEZ et al.	ASTROPHYSICAL JOURNAL LETTERS	2015
84	Radio monitoring of the periodically variable ir source LRL 54361: No direct correlation between the radio and IR emissions	LUIS FELIPE DE JESUS RODRIGUEZ JORGE AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ et al.	ASTROPHYSICAL JOURNAL	2015
85	Fragmentation of massive dense cores down to $\sim 1000$ AU: Relation between fragmentation and density structure	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ Estalella, Robert et al.	ASTROPHYSICAL JOURNAL	2014

## AINA PALAU PUIGVERT

86	A spider-like outflow in Barnard 5 - IRS 1: The transition from a collimated jet to a wide-angle outflow?	LUIS ALBERTO ZAPATA GONZALEZ AINA PALAU PUIGVERT Arce, Hector G. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2014
87	JVLA observations of IC 348 SW: Compact radio sources and their nature	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE	ASTROPHYSICAL JOURNAL	2014
88	The hot core towards the intermediate-mass protostar NGC 7129 FIRS 2: Chemical similarities with Orion KL	AINA PALAU PUIGVERT Fuente, A. Cernicharo, J. et al.	ASTRONOMY & ASTROPHYSICS	2014
89	IC 348-SMM2E: A Class 0 proto-brown dwarf candidate forming as a scaled-down version of low-mass stars	AINA PALAU PUIGVERT LUIS ALBERTO ZAPATA GONZALEZ LUIS FELIPE DE JESUS RODRIGUEZ JORGE et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2014
90	On the origin of the molecular outflows in IRAS 16293-2422	AINA PALAU PUIGVERT Rao R. Torrelles J.M. et al.	ASTROPHYSICAL JOURNAL LETTERS	2014
91	Erratum: Deuteration as an evolutionary tracer in massive-star formation (Astronomy And Astrophysics (2014) C1 (562) DOI: 10.1051/0004-6361/201116631e))	AINA PALAU PUIGVERT Audard M. Leurini S. et al.	ASTRONOMY & ASTROPHYSICS	2014
92	A luminous blue variable star interacting with a nearby infrared dark cloud	AINA PALAU PUIGVERT Henkel C. Girart J.M. et al.	ASTROPHYSICAL JOURNAL LETTERS	2014
93	Ammonia observations in the LBV nebula G79.29+0.46: Discovery of a cold ring and some warm spots	AINA PALAU PUIGVERT Henkel C. Jiménez-Esteban F. et al.	ASTRONOMY & ASTROPHYSICS	2014
94	Extended warm gas in Orion KL as probed by methyl cyanide ?	AINA PALAU PUIGVERT Tercero B. Esplugues G.B. et al.	ASTRONOMY & ASTROPHYSICS	2014
95	A CO survey in planet-forming disks: Characterizing the gas content in the epoch of planet formation	AINA PALAU PUIGVERT Wilner D. Torrelles J.M. et al.	ASTRONOMICAL JOURNAL	2014
96	A gas-rich disk around DX Cha	AINA PALAU PUIGVERT Wilner D. Torrelles J.M. et al.	Iau Symposium Proceedings Series	2013
97	The outburst decay of the low magnetic field magnetar SGR 0418+5729	AINA PALAU PUIGVERT Stella L. Ratti E. et al.	ASTROPHYSICAL JOURNAL	2013
98	A line confusion-limited millimeter survey of Orion KL*: III. Sulfur oxide species	AINA PALAU PUIGVERT Bell T.A. Marcelino N. et al.	ASTRONOMY & ASTROPHYSICS	2013

## AINA PALAU PUIGVERT

99	Combined IRAM and Herschel/HIFI study of cyano(di)acetylene in Orion KL: Tentative detection of DC3N	AINA PALAU PUIGVERT Wang S. Crockett N.R. et al.	ASTRONOMY & ASTROPHYSICS	2013
100	Iras 19520+2759: A 105 L massive young stellar object driving a collimated outflow	AINA PALAU PUIGVERT Contreras C.S. Sahai R. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2013
101	Unveiling a network of parallel filaments in the infrared dark cloud G14.225-0.506	AINA PALAU PUIGVERT Busquet G. Zhang Q. et al.	ASTROPHYSICAL JOURNAL LETTERS	2013
102	Temperature and kinematics of protoclusters with intermediate and high-mass stars: The case of IRAS 05345+3157	AINA PALAU PUIGVERT Fontani F. Caselli P. et al.	ASTRONOMY & ASTROPHYSICS	2012
103	Dense gas in IRAS 20343+4129: An ultracompact Hii region caught in the act of creating a cavity	AINA PALAU PUIGVERT Fontani F. Busquet G. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2012
104	A search for pre-substellar cores and proto-brown dwarf candidates in Taurus: Multiwavelength analysis in the B213-L1495 clouds	AINA PALAU PUIGVERT de Gregorio-Monsalvo I. Morata Ò. et al.	MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY	2012
105	Deuteration as an evolutionary tracer in massive-star formation	AINA PALAU PUIGVERT Fontani F. Caselli P. et al.	ASTRONOMY & ASTROPHYSICS	2011
106	N <sub>2</sub> H <sup>+</sup> depletion in the massive protostellar cluster AFGL 5142	AINA PALAU PUIGVERT Busquet G. Estalella R. et al.	ASTRONOMY & ASTROPHYSICS	2010
107	Three intermediate-mass young stellar objects with different properties emerging from the same natal cloud in IRAS 00117+6412	AINA PALAU PUIGVERT Sánchez-Monge Á. Busquet G. et al.	ASTRONOMY & ASTROPHYSICS	2010
108	The reflection-symmetric wiggle of the young protostellar jet HH 211	AINA PALAU PUIGVERT Lee C.-F. Hasegawa T.I. et al.	ASTROPHYSICAL JOURNAL	2010
109	Multiple shells around G79.29+0.46 revealed from near-IR to millimeter data	AINA PALAU PUIGVERT Jiménez-Esteban F.M. Rizzo J.R.	ASTROPHYSICAL JOURNAL	2010
110	The NH <sub>2</sub> D/NH <sub>3</sub> ratio toward pre-protostellar cores around the UC H(ii) region in IRAS 20293+3952	AINA PALAU PUIGVERT Busquet G. Estalella R. et al.	ASTRONOMY & ASTROPHYSICS	2010
111	A proto brown dwarf candidate in Taurus	AINA PALAU PUIGVERT Barrado D. Morales-Calderón M. et al.	ASTRONOMY & ASTROPHYSICS	2009

## AINA PALAU PUIGVERT

112	Rotation and outflow motions in the very low-mass class 0 protostellar system hh211 at subarcsecond resolution	AINA PALAU PUIGVERT Lee C.-F. Hirano N. et al.	ASTROPHYSICAL JOURNAL	2009
113	Low-mass protostars and dense cores in different evolutionary stages in IRAS 00213+6530	AINA PALAU PUIGVERT Busquet G. Estalella R. et al.	ASTRONOMY & ASTROPHYSICS	2009
114	Survey of intermediate/high mass star-forming regions at centimeter and millimeter wavelengths	AINA PALAU PUIGVERT Sánchez-Monge Á. Estalella R. et al.	ASTRONOMY & ASTROPHYSICS	2008
115	Submillimeter arcsecond-resolution mapping of the highly collimated protostellar jet HH 211	AINA PALAU PUIGVERT Lee C.-F. Ho P.T.P. et al.	ASTROPHYSICAL JOURNAL	2007
116	Star formation in a clustered environment around the UCH II region in IRAS 20293+3952	AINA PALAU PUIGVERT Estalella R. Girart J.M. et al.	ASTRONOMY & ASTROPHYSICS	2007
117	Unveiling the nature and interaction of the intermediate/high-mass YSOs in IRAS 20343+4129	AINA PALAU PUIGVERT Estalella R. Ho P.T.P. et al.	ASTRONOMY & ASTROPHYSICS	2007
118	Submillimeter emission from the hot molecular jet HH 211	AINA PALAU PUIGVERT Ho P.T.P. Zhang Q. et al.	ASTROPHYSICAL JOURNAL	2006
119	The dusty envelope of L 723 at sub-MM wavelengths	AINA PALAU PUIGVERT Estalella R. Girart J.M. et al.	REVISTA MEXICANA DE ASTRONOMIA Y ASTROFISICA, SERIE DE CONFERENCIAS	2003
120	IRAS 21391+5802: The molecular outflow and its exciting source	AINA PALAU PUIGVERT Beltrán M.T. Girart J.M. et al.	ASTROPHYSICAL JOURNAL	2002



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**AINA PALAU PUIGVERT**

**LIBROS Y CAPITULOS CON ISBN**

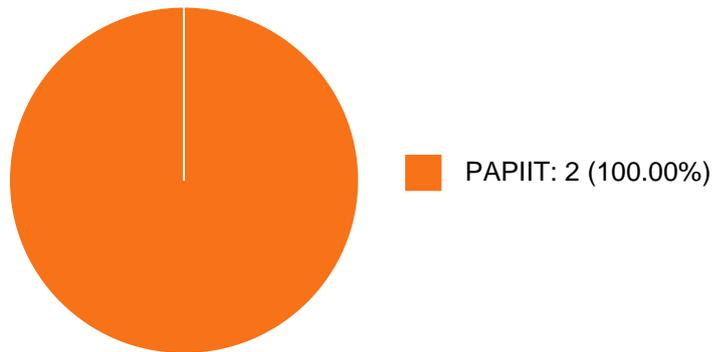
**No se encuentran registros en la base de datos de Humanindex asociados a:**

**AINA PALAU PUIGVERT**

**AINA PALAU PUIGVERT**

**PARTICIPACIÓN EN PROYECTOS**

**Histórico de participación en proyectos**

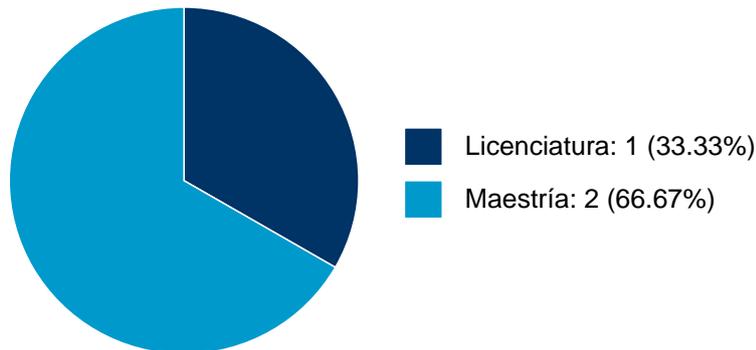


#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Formación de objetos extremos en nubes moleculares en colapso.	AINA PALAU PUIGVERT	Recursos PAPIIT	01-01-2021	31-12-2022
2	Poniendo a prueba el modelo de colapso jerárquico global con teoría y observaciones	ENRIQUE CRISTIAN VAZQUEZ SEMADENI AINA PALAU PUIGVERT	Recursos PAPIIT	01-01-2023	31-12-2025

## AINA PALAU PUIGVERT

### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis

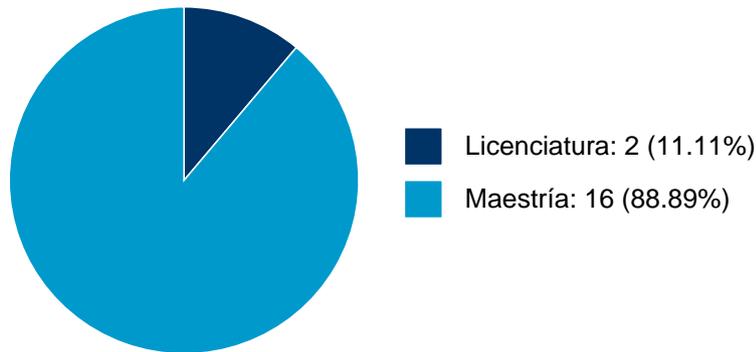


#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Estudio milimétrico con alta resolución angular de la estrella joven masiva hinchada IRAS 19520+2759	Tesis de Maestría	AINA PALAU PUIGVERT,	Sánchez Gantes, Grecia Paloma Samadhi,	Instituto de Radioastronomía y Astrofísica,	2022
2	Estudio de la complejidad química en OMC-IS con alta resolución angular	Tesis de Maestría	AINA PALAU PUIGVERT,	Drouaillet Ochoa, Esmeralda,	Instituto de Radioastronomía y Astrofísica,	2021
3	Estudio milimétrico del contenido subestelar en la región de Tauro SSTB213 J041757	Tesis de Licenciatura	AINA PALAU PUIGVERT,	Durán García, Mariano Alfonso,	Instituto de Radioastronomía y Astrofísica,	2021

## AINA PALAU PUIGVERT

### DOCENCIA IMPARTIDA

#### Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Licenciatura	INTRODUCCION A LA RADIOASTRONOMIA	Escuela Nacional de Estudios Superiores, Unidad Morelia, Michoacán	3	2024-2
2	Licenciatura	INTRODUCCION A LA RADIOASTRONOMIA	Escuela Nacional de Estudios Superiores, Unidad Morelia, Michoacán	5	2023-2
3	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	5	2023-1
4	Maestría	SEMINARIO DE GRADUACIÓN	Instituto de Radioastronomía y Astrofísica	1	2022-1
5	Maestría	SEMINARIO DE INVESTIGACIÓN II DE LOS CAMPOS DE CONOCIMIENTO TEÓRICA, OBSERVACIONAL, CAMPOS PART	Instituto de Radioastronomía y Astrofísica	1	2021-2
6	Maestría	PROBLEMAS CONTEMPORÁNEOS DE ASTRONOMÍA MULTIFRECUENCIA DEL CAMPO DE CONOCIMIENTO OBSV.	Instituto de Radioastronomía y Astrofísica	2	2021-2
7	Maestría	SEMINARIO DE INVESTIGACIÓN I DE LOS CAMPOS DE CONOCIMIENTO TEÓRICA, OBSERVACIONAL, CAMPOS PART	Instituto de Radioastronomía y Astrofísica	1	2021-1

**AINA PALAU PUIGVERT**

8	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	4	2021-1
9	Maestría	SEMINARIO DE GRADUACIÓN	Instituto de Radioastronomía y Astrofísica	1	2021-1
10	Maestría	SEMINARIO DE INVESTIGACIÓN II DE LOS CAMPOS DE CONOCIMIENTO TEÓRICA, OBSERVACIONAL, CAMPOS PART	Instituto de Radioastronomía y Astrofísica	1	2020-2
11	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	4	2020-1
12	Maestría	SEMINARIO DE INVESTIGACIÓN I DE LOS CAMPOS DE CONOCIMIENTO TEÓRICA, OBSERVACIONAL, CAMPOS PART	Instituto de Radioastronomía y Astrofísica	1	2020-1
13	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	3	2019-1
14	Maestría	PROBLEMAS CONTEMPORÁNEOS DE ASTRONOMÍA MULTIFRECUENCIA DEL CAMPO DE CONOCIMIENTO OBSV.	Instituto de Radioastronomía y Astrofísica	2	2019-1
15	Maestría	MATERIA INTERESTELAR	Instituto de Radioastronomía y Astrofísica	2	2018-1
16	Maestría	MATERIA INTERESTELAR-318585	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2017-1
17	Maestría	MATERIA INTERESTELAR-396842	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	4	2017-1
18	Maestría	MATERIA INTERESTELAR	Centro de Radioastronomía y Astrofísica en Morelia, Mich.	1	2016-1



**Sistema Integral de Información Académica**  
**Coordinación de Planeación, Evaluación y**  
**Simplificación de la Gestión Institucional**  
**Reporte individual**



**AINA PALAU PUIGVERT**

**PATENTES**

**No se encuentran registros en la base de datos de patentes asociados a:**

**AINA PALAU PUIGVERT**

**AINA PALAU PUIGVERT**

**FUENTES DE INFORMACIÓN**

**Internos**

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

**Externos**

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024