Dominique M. Segura-Cox

The University of Texas at Austin Department of Astronomy 2515 Speedway, Stop C1400 Austin, Texas 78712-1205 dominique.seguracox@austin.utexas.edu (512) 232-3495 www.seguracox.com

ORCID: 0000-0003-3172-6763

EDUCATION

Ph.D. in Astronomy – University of Illinois, Champaign-Urbana, Illinois

2011 - 2017

Illinois Distinguished Fellow

Thesis: "Observations of Disks around the Youngest Protostars: Characterizing Frequency,

Dust Properties, and Magnetic Fields at the Earliest Times"

Advisor: Prof. Leslie Looney

B.S. in Astrophysics and Astronomy – University of Michigan, Ann Arbor, Michigan

2007 - 2011

Michigan Tradition Award Graduated with High Honors Advisor: Prof. Sally Oey

PROFESSIONAL APPOINTMENTS

National Science Foundation Astronomy & Astrophysics Postdoctoral Fellow

2021 – Present

The University of Texas at Austin Mentor: Assoc. Prof. Stella Offner

Postdoctoral Researcher

2017 - 2021

Max Planck Institute for Extraterrestrial Physics, Center for Astrochemical Studies

Mentor: Prof. Dir. Paola Caselli

Graduate Research Assistant

2011 - 2017

University of Illinois Astronomy Department

Advisor: Prof. Leslie Looney, Mentor: Prof. You-Hua Chu

ACTIVE RESEARCH AREAS

- Observing properties of young protostellar disks still embedded in their larger-scale natal envelopes
- > Investigating the influence of accretion from envelopes on disk structure/evolution and multiplicity
- > Examining substructures in embedded disks to search for the earliest footholds of planet formation

FUNDING

\$624,473 total — \$355,000 as Principal Investigator

National Science Foundation Astronomy & Astrophysics Postdoctoral Fellowship

2021 - 2024

National Science Foundation Fellowship, \$300,000, AST-2102405, Principal Investigator

Conference: 21st Annual Symposium of the NSF AAPF Fellows

2022

National Science Foundation Grant, \$44,473, AST-2236620, Lead Author of Grant

SOFIA Cycle 4 General Observing Grant

2015

SOFIA Science Mission Operations, \$55,000 for Project #04_0170, Science Principal Investigator

ALMA NRAO Student Observing Support Fellowship National Radio Astronomical Observatory, \$35,000 for one year of graduate stipend	2015
VLA NRAO Student Observing Support Fellowship National Radio Astronomical Observatory, \$35,000 for one year of graduate stipend	2013
Illinois Distinguished Fellowship University of Illinois, \$155,000 for three years of graduate stipend & tuition	2011
AWARDS	
Mr. and Mrs. Hsiang-Pai and Wen-Hua Chu Department of Astronomy Excellence in F Graduate Student Award University of Illinois Astronomy Department	Research 2017
Excellence Award in Recognition of Academic Excellence & Good Citizenship University of Illinois	2016 & 2017
Astronomy Undergraduate Research Award and Service Award University of Michigan Department of Astronomy	2011
EXTERNAL RESEARCH TALKS	
29 external talks — 14 invited talks, including 3 reviews and 3 colloquia	
(29) University of Michigan Department of Astronomy, colloquium	Feb 2023
(28) 241st Meeting of the American Astronomical Society	Jan 2023
(27) 239th Meeting of the American Astronomical Society, invited NRAO/ngVLA Special Session: Chemical Probes of Astrophysical Systems	Jan 2023
(26) From Clouds to Planets II: The Astrochemical Link, review	Oct 2022
(25) University of Michigan Star and Planet Formation Journal Club, invited	Mar 2022
(24) Jodrell Bank Centre for Astrophysics, colloquium	Mar 2022
(23) NSF Astronomy & Astrophysics Postdoctoral Fellows Symposium	Jan 2022
(22) Gaps, Rings, Spirals, and Vortices: Structure Formation in Planet-Forming Disks, review	w Oct 2021
(21) Puzzles of Star Formation, invited	Jul 2021
(20) European Astronomical Society Annual Meeting 2021, review Special Session: Streamers: Thinking Outside the Planet-Forming Disk	Jun 2021
(19) From Core to Disk 2	May 2021
(18) University of Illinois Astronomy Department, colloquium	Mar 2021
(17) Five Years after HL Tau: a New Era in Planet Formation	Dec 2020
(16) MPIA Disk Group Seminar, invited	Nov 2020
(15) Harvard-Smithsonian Center for Astrophysics SMA Seminar, invited	Sep 2020
(14) Europlanet Science Congress 2020	Sep 2020
(13) European Astronomical Society Annual Meeting 2020	Jun 2020
(12) Building Blocks of Planets 2020 Workshop, invited	Apr 2020
(11) ALMA2019: Science Results and Cross-Facility Synergies	Oct 2019

(10) European Week of Astronomy and Space Science (EWASS), invited Special Session: <i>The Physics and Chemistry of Class I Protostars in the ALMA Era</i>	Jun 2019
(9) National Radio Astronomical Observatory Lunch Seminar	Jan 2019
(8) Embedded Disk and Planet Formation Workshop: Leiden, invited	Jul 2017
(7) 229th Meeting of the American Astronomical Society	Jan 2017
(6) Harvard-Smithsonian Center for Astrophysics, invited	Dec 2016
(5) Half a Decade of ALMA: Cosmic Dawns Transformed Meeting	Sep 2016
(4) National Radio Astronomical Observatory Lunch Seminar	Feb 2016
(3) Midwest Magnetic Fields Workshop	May 2015
(2) AAS Workshop on Dense Cores: Origin, Evolution, and Collapse	Jul 2014
(1) 69th International Symposium on Molecular Spectroscopy	Jun 2014
APPROVED OBSERVING PROPOSALS AS PRINCIPAL INVESTI	GATOR
18 approved proposals — 7 facilities — 196.8 hours total	Gillon
(18) How common are streamers? An unbiased survey of all protostellar envelopes in a star-fo	ormina
region ALMA, 2022.1.01259.S	2022
1	g 2021 & 2022
ALMA , Project 2021.1.01707.S & 2022.1.00197.S	
(15) Does a planet-forming Class I disk accrete from core scales? APEX, Project M9524C_107	2021
(14) Does an Accretion Streamer of a Planet-Forming Class I Disk Reach Core Scales? IRAM 30-meter, Project 112-20	2020
(13) Chemically and Kinematically Probing into the Disks of Two Class 0 Protostars NOEMA, Project W19AK	2020
(11 & 12) Envelope to Disk: The Composition of Accretion NOEMA, Projects W19AG & W20AG	2019 & 2020
(10) The Origins of Complex Organic Molecule Emission in Protostars NOEMA, Project W18AS	2018
(9) Linking the Stages of Star Formation: Kinematics and Chemistry of Class I Protostar TMC NOEMA, Project W18AN	CIA 2018
(8) Chemistry Associated with the Protostellar Disk with the Youngest-Known Ringed Dust Structure ALMA, Project 2018.1.01634.S	2018
(7) Doubling the Number of Class 0/I Disks Through Line Observations of Perseus Candidates ALMA, Project 2018.1.01348.S	s 2017
(6) First Detection of Disks around Class 0/I Protostars in Cepheus SMA, Project 2017A-S044	2017
(5) Has Planet Formation Already Begun in the Class I Protostellar Phase? ALMA, Project 2015.1.01512.S	2015

(4) Confirming the First Class 0 Circumbinary Disk ALMA, Project 2015.1.01053.S	2015
(3) FIR Polarization of Large-Scale Emission around Young Protostars: The TADPOL+E Survey SOFIA , Project #04_0170	2015
(2) Probing Magnetic Braking with the Disk of Class 0 Source L1527 CARMA, Project c1188	2013
(1) The Inner Envelope Kinematics of the Class 0 Source L1527 CARMA, Project c1122	2013

LARGE OBSERVING PROGRAMS WITH LEADERSHIP ROLES

PROtostars & DIsks: Global Evolution (PRODIGE)

NOEMA, MPG-IRAM Observing Program L19MB, 620 hours, observations ongoing 2019 – Present Co-PIs: Paola Caselli & Thomas Henning

- Acting as a principal science investigator: developed calibration and imaging procedures
- Designed and coordinated Ph.D. and postdoc projects
- > Drafted the proposal, defined scientific rationale, set observing strategy, and selected targets
- > Authored a data reduction and imaging cookbook for the program, to be used by all team members

Fifty AU STudy of the chemistry in the disk/envelope system of Solar-like protostars (FAUST) ALMA, Large Program 2018.1.01205.L, 152 hours, observations complete 2018 – Present Co-PIs: Satoshi Yamamoto, Cecilia Ceccarelli, Claire Chandler, Claudio Codella & Nami Sakai

▶ Leading the data reduction and science exploitation for 1 of 13 targets, managing team efforts

ON-SITE OBSERVING EXPERIENCE

CARMA Observing Shifts, 35 days

2013 - 2014

➢ Completed five week-long, 24 hours-a-day shifts which included controlling the telescope array, checking weather conditions, cooperatively taking data for other scientists, and assessing data quality

CARMA Summer School 2012

➤ Learned to operate the CARMA telescope array, designed and carried out first millimeter-wave observing project, received training in interferometric data reduction and analysis techniques

TECHNICAL SKILLS

Facilities: Extensive experience with ALMA, NOEMA, VLA, SMA, CARMA, IRAM-30m, APEX, SOFIA, *Spitzer*

Observational techniques: Skilled with advanced interferometric calibration and analysis including self-calibration of long-baseline data, reducing polarized observations, and studies in the *uv*-plane

Astronomical software: Proficient with CASA, GILDAS, MIRIAD, SAOImage DS9, IRAF, SMART **Programming languages**: Familiar with Python, C, IDL, shell-scripting, R, HTML

TEACHING EXPERIENCE

Guest Instructor, The University of Texas at Austin

Undergraduate Course

Introductory Astronomy (for science majors), instructed 2 lectures

Graduate Student Teaching Assistant, University of Illinois

➢ Graduate Course

Theoretical Stellar Physics

Spring 2015

Upper-Division Undergraduate Courses

Astronomical Techniques Solar System & Interstellar Medium

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Stellar Astrophysics

Spring 2012, Fall 2014 Spring 2013 Fall 2011, Fall 2012

MENTORING EXPERIENCE

Postdoc Mentor to Undergraduate Student, The University of Texas at Austin, TAURUS program

➤ Research Mentor, with direct supervision role

Cayden Kirkpatrick – *Topic: measuring protostar masses via Keplerian rotation* 2022 – Present

➤ Currently B.S. student at University of Wisconsin-Madison

Postdoc Mentor to Graduate Students, Max Planck Institute for Extraterrestrial Physics

▶ Research Mentor, with direct supervision role

Maria Teresa Valdivia-Mena – Topic: observing envelope to disk infall

2020 – Present

➢ Currently Ph.D. student at Max Planck Institute for Extraterrestrial Physics

Carolina Agurto Gangas - Topic: modeling dust in envelopes and disks

2018 - 2020

- ➢ Earned Ph.D. in 2020 from Ludwig-Maximilians-Universität München
- > Currently FONDECYT Postdoctoral Fellow at Universidad de Chile
- ▶ Research Mentor

Joaquin Zamponi - Topic: producing simulated observations of disks

2019 – Present

> Currently Ph.D. student at Max Planck Institute for Extraterrestrial Physics

Graduate Mentor to Undergraduate Students, University of Illinois

➢ Research Mentor

John DeVries – Topic: calibrating and imaging VLA continuum data

2017

- ➤ Earned M.S. in 2019 from California State University, Los Angeles
- > Currently Electrical Engineer at Ecliptic Enterprises Corp.

Jiayin Dong - Topic: imaging Class II dust disks with ALMA data

2015 - 2016

- ➤ Earned Ph.D. in 2022 from Pennsylvania State University
- ➣ Currently Simons Foundation Flatiron Research Fellow at the Flatiron Institute

Andrew Nadolski - Topic: probing outflow kinematics with CARMA data

2014

- ➤ Earned Ph.D. in 2020 from University of Illinois
- > Currently Process Engineer at Intel Corp.

Zhuchang Zhan - Topic: identifying outflows with CARMA data

2013

- ➤ Earned Ph.D. in 2021 from Massachusetts Institute of Technology
- ➤ Currently Data Scientist at Apple
- ➤ Women in Astronomy Mentor

Sushma Adari

2014 - 2017

- ➤ Earned B.S. in 2018 from University of Illinois
- Currently Data Scientist at SpiderRock Advisors

PROFESSIONAL SERVICE

Lead Conference Organizer: 21st Annual Symposium of the NSF AAPF Fellows

2022 - 2023

> Splinter Session at the 241st Meeting of the American Astronomical Society

Scientific Organizing Committee Member Multiplicity in Young Stars Conference, Niels Bohr Institute	2023
Member of Dissertation Advisory Committees Maria Teresa Valdivia-Mena, Max Planck Institute for Extraterrestrial Physics Logquin Zampani, Max Planck Institute for Extraterrestrial Physics	2020 – Present 2019 – Present
 Joaquin Zamponi, Max Planck Institute for Extraterrestrial Physics Grant Panel Reviewer 	2019 – Piesein
 NSF Astronomy and Astrophysics Grant Program NASA Research Opportunities in Space and Earth Sciences 	2022 2022
MPE-ESO-LMU Star and Planet Formation Seminar Co-organizer, Max Planck Institute for Extraterrestrial Physics	2018 – 2021
Co-presenter of Career Webinar for Ph.D. Students: How to Apply for Your First Postdo Presented to MPE, MPA, and ESO students	oc 2020
Journal Reviews: Nature, The Astrophysical Journal, The Astrophysical Journal Letters	2016 - Present
Graduate Student Representative to the Faculty, University of Illinois Astronomy Department ▶ Elected by peers	2016 – 2017
Treasurer of Women in Astronomy, University of Illinois Astronomy Department	2014 – 2017
University of Illinois Fellowship Board Executive Committee Served as a student panelist to select campus-wide graduate fellowship recipients	2014
Vice President of the Student Astronomical Society, University of Michigan	2010 - 2011
PRESS COVERAGE	
Stars and Planets Grow Up as Siblings, Max Planck Society press release Picked up by news sites worldwide and covered in 15+ languages Highlighted in a 20-minute interview on the John Bachelor Show, aired on syndicated A	2020 AM radio
A Growing Stellar System Directly Fed by the Mother Cloud, Max Planck Society pres	ss release 2020
VLA Reveals Dramatic New Evidence about Star and Planet Formation, NRAO press	release 2016
SELECT OUTREACH ACTIVITIES	
Panelist of <i>The Magic Leap & UT Austin Women in Natural Science Career Panel</i> Spoke with UT Austin undergraduate students about career path and advancement strategy.	2021 tegies
 YouTube Video Discussion: Science in Stowaway, Max Planck Society, 2-part video intersection Commented on the scientific accuracy of concepts portrayed in Stowaway, a feature-lener Recorded on-set at the Bavaria Filmstadt studio, collaboration between YouTuber Dokton the Max Planck Society, German dubbing 	igth film
Astronomy on Tap Speaker , Max Planck Institute for Extraterrestrial Physics ▶ Presented <i>Baby Photos: Star Formation Caught in the Act</i> , aimed at an audience of the ▶ Gave interactive lecture and answered layperson level questions	2020 general public
Public Total Eclipse Viewing, University of Illinois → Aided with advanced planning logistics for off-campus event, lead hands-on demonstrate	2017

Correctional Facility Eclipse Outreach, Harrisburg Juvenile and Vienna Correctional Facilities 2017 > Engaged with incarcerated juvenile and adult individuals in the path of totality of the upcoming eclipse Girls Explore Astronomy Summer Camp, University of Illinois 2016 Assisted with organization and presented portions of a week-long astronomy summer science camp for 10-12-year-old girls, coordinated with the Champaign Park District Role Model Video Series, NRAO, video interview 2016 Discussed career path and past challenges faced, for NRAO website aimed at the public The American Astronomical Society Astronomy Ambassadors Program Workshop 2016 > Participated in formal outreach training aimed at early career astronomers I-RISE Summer Teacher Workshops, University of Illinois 2012 & 2013 > Led, organized, and lectured at two-day workshops aimed at middle and high school math and science

teachers to incorporate astronomy throughout their curricula

PUBLICATIONS

also available on ADS

h-index = 27 — 56 total papers — 2024+ citations — average 36+ citations/paper

FIRST AUTHOR PAPERS — 242+ citations — average 60+ citations/paper

- (4) Four annular structures in a protostellar disk with an age <500,000 years
 - D. M. Segura-Cox, A. Schmiedeke, J. E. Pineda, I. W. Stephens, M. Fernández-López, L. W. Looney, P. Caselli, Z.-Y. Li, L. G. Mundy, W. Kwon, & R. J. Harris
 Nature, 586, 228 (2020) | 71+ citations
- (3) The VLA Nascent Disk and Multiplicity Survey of Perseus Protostars (VANDAM). V. 18 Candidate Disks around Class 0 and I Protostars in the Perseus Molecular Cloud
 - D. M. Segura-Cox, L. W. Looney, J. J. Tobin, Z.-Y. Li, R. J. Harris, S. Sadavoy, M. M. Dunham, C. Chandler, K. Kratter, L. Perez, & C. Melis
 ApJ, 866, 161 (2018) | 59+ citations
- (2) The VLA Nascent Disk and Multiplicity Survey: First Look at Resolved Candidate Disks around Class 0 and I Protostars in the Perseus Molecular Cloud
 - D. M. Segura-Cox, R. J. Harris, J. J. Tobin, L. W. Looney, Z.-Y. Li, C. Chandler, K. Kratter, M. M. Dunham, S. Sadavoy, L. Perez, & C. Melis ApJ, 817, 14 (2016) | 52+ citations
- (1) The Magnetic Field in the Class 0 Protostellar Disk of L1527
 - D. M. Segura-Cox, L. W. Looney, I. W. Stephens, M. Fernández-López, W. Kwon, J. J. Tobin, Z.-Y. Li, & R. Crutcher
 ApJL, 798, 2 (2015) | 60+ citations

CO-AUTHOR PAPERS WITH SIGNIFICANT CONTRIBUTION

- (19) PRODIGE Envelope to Disk with NOEMA II. Small-scale temperature structure and a streamer feeding the SVS13A protobinary using CH3CN and DCN
 - T.-H. Hsieh, **D. M. Segura-Cox**, J. E. Pineda, P. Caselli, L. Bouscasse, R. Neri, A. López-Sepulcre, M. T. Valdivia-Mena, M. J. Maureira, T. Henning (+11 co-authors) arXiv:2211.05022 (2022)
- (18) Dust Hot Spots at 10 au Scales around the Class 0 Binary IRAS 16293-2422 A: A Departure from the Passive Irradiation Model
- M. J. Maureira, M. Gong, J. E. Pineda, H. B. Liu, K. Silsbee, P. Caselli, J. Zamponi, **D. M. Segura-Cox**, & A. Schmiedeke ApJL, 941, 2 (2022)
- (17) PRODIGE envelope to disk with NOEMA. I. A 3000 au streamer feeding a Class I protostar M. T. Valdivia-Mena, J. E. Pineda, D. M. Segura-Cox, P. Caselli, R. Neri, A. López-Sepulcre, N. Cunningham, L. Bouscasse, D. Semenov, T. Henning (+12 co-authors) A&A, 667, 12 (2022)
- (16) ALMA-DOT VI: Accretion shocks in the disk of DG Tau and HL Tau
 A. Garufi, L. Podio, C. Codella, D. M. Segura-Cox, M. Vander Donckt, S. Mercimek, F. Bacciotti, D. Fedele, M. Kasper, J. E. Pineda (+2 co-authors)
 A&A, 658, 104 (2022)

- (15) A protostellar system fed by a streamer of 10,500 au length
 - J. E. Pineda, **D. M. Segura-Cox**, P. Caselli, N. Cunningham, B. Zhao, A. Schmiedeke, M. J. Maureira, & R. Neri

Nature Astronomy, 4, 1158 (2020)

- (14) Dust masses of young disks: constraining the initial solid reservoir for planet formation
 - L. Tychoniec, C. F. Manara, G. P. Rosotti, E. F. van Dishoeck, A. J. Cridland, T.-H. Hsieh, N. M. Murillo, D. M. Segura-Cox, S. E. van Terwisga, & J. J. Tobin A&A, 640, 19 (2020)
- (13) Orbital and mass constraints of the young binary system IRAS 16293-2422 A
 - M. J. Maureira, J. E. Pineda, **D. M. Segura-Cox**, P. Caselli, L. Testi, G. Lodato, L. Loinard, & A. Hernandez-Gomez

ApJ, 897, 59 (2020)

- (12) The GRAVITY Young Stellar Object survey I. Probing the disks of Herbig Ae/Be stars at terrestrial orbits
 - K. Perraut, L. Labadie, B. Lazareff, L. Klarmann, D. M. Segura-Cox, M. Benisty, J. Bouvier, W. Brandner, A. Caratti o Garatti, P. Caselli (+70 co-authors)
 A&A, 632, 53 (2019)
- (11) Gas flow and accretion via spiral streamers and circumstellar disks in a young binary protostar F. O. Alves, P. Caselli, J. M. Girart, **D. M. Segura-Cox**, G. A. P. Franco, A. Schmiedeke, & B. Zhao Science, 366, 6461 (2019)
- (10) The specific angular momentum radial profile in dense cores: improved initial conditions for disk formation
 - J. E. Pineda, B. Zhao, A. Schmiedeke, **D. M. Segura-Cox**, P. Caselli, P. C. Myers, J. Tobin, & M. Dunham

ApJ, 822, 103 (2019)

- (9) The Mass Evolution of Protostellar Disks and Envelopes in the Perseus Molecular Cloud B. C. Andersen, I. W. Stephens, M. M. Dunham, R. Pokhrel, J. K. Jorgensen, S. Frimann, D. M. Segura-Cox, P. C. Myers, T. L. Bourke, J. J. Tobin, & L. Tychoniec ApJ, 873, 54 (2019)
- (8) The VLA Nascent Disk and Multiplicity Survey of Perseus Protostars (VANDAM). IV. Free-Free Emission from Protostars: Links to Infrared Properties, Outflow Tracers, and Protostellar Disk Masses
 - L. Tychoniec, J. J. Tobin, A. Karska, C. Chandler, M. M. Dunham, R. J. Harris, K. M. Kratter, Z.-Y. Li, L. W. Looney, C. Melis (+4 co-authors including **D. M. Segura-Cox**) ApJS, 238, 19 (2018)
- (7) The VLA Nascent Disk And Multiplicity Survey of Perseus Protostars (VANDAM). III. Extended Radio Emission from Protostars in Perseus
 - L. Tychoniec, J. J. Tobin, A. Karska, C. Chandler, M. M. Dunham, Z.-Y. Li, L. W. Looney, D. M. Segura-Cox, R. J. Harris, C. Melis, & S. I. Sadavoy
 ApJ, 852, 18 (2018)
- **(6)** The VLA Nascent Disk and Multiplicity Survey of Perseus Protostars (VANDAM). II. Multiplicity of Protostars in the Perseus Molecular Cloud
 - J. J. Tobin, L. W. Looney, Z.-Y. Li, C. J. Chandler, M. M. Dunham, D. M. Segura-Cox, S. I. Sadavoy, C. Melis, R. J. Harris, K. Kratter, & L. Perez ApJ, 818, 73 (2016)

- (5) The Runaways and Isolated O-Type Star Spectroscopic Survey of the SMC (RIOTS4)
 - J. B. Lamb, M. S. Oey, **D. M. Segura-Cox**, A. S. Graus, D. C. Kiminki, J. B. Golden-Marx, & J. Wm. Parker

ApJ, 817, 113 (2016)

- (4) High-resolution 8 mm and 1 cm Polarization of IRAS 4A from the VLA Nascent Disk and Multiplicity (VANDAM) Survey
 - E. G. Cox, R. J. Harris, L. W. Looney, **D. M. Segura-Cox**, J. J. Tobin, Z.-Y. Li, L. Tychoniec, C. J. Chandler, M. M. Dunham, K. Kratter (+3 co-authors)

 ApJ, 814, 28 (2015)
- (3) CARMA Large Area Star Formation Survey: Structure and Kinematics of Dense Gas in Serpens Main K. I. Lee, M. Fernández-López, S. Storm, L. W. Looney, L. G. Mundy, **D. M. Segura-Cox**, P. J. Teuben, E. Rosolowsky, H. G. Arce, E. C. Ostriker (+14 co-authors) ApJ, 797, 76 (2014)
- (2) Spitzer Observations of Dust Emission from H II Regions in the Large Magellanic Cloud I. W. Stephens, J. M. Evans, R. Xue, Y.-H. Chu, R. A. Gruendl, & D. M. Segura-Cox ApJ, 784, 147 (2014)
- (1) The Initial Mass Function of Field OB Stars in the Small Magellanic Cloud J. B. Lamb, M. S. Oey, A. A. Graus, F. C. Adams, & **D. M. Segura-Cox** ApJ, 763, 101 (2013)

CO-AUTHOR PAPERS AS CONTRIBUTING AUTHOR

- (33) FAUST. V. Hot methanol in the [BHB2007] 11 protobinary system; hot corino versus shock origin C. Vastel, F. Alves, C. Ceccarelli, M Bouvier, I. Jimenez-Serra, T. Sakai, P. Caselli, L. Evans, F. Fontani, R. Le Gal (+56 co-authors including **D. M. Segura-Cox**)

 A&A, 664, 171 (2022)
- (32) Chemical and Physical Characterization of the Isolated Protostellar Source CB68: FAUST IV M. Imai, Y. Oya, B. Svoboda, H. Liu, B. Lefloch, S. Viti, Y. Zhang, C. Ceccarelli, C. Codella, C. J. Chandler (+63 co-authors including D. M. Segura-Cox) ApJ, 934, 70 (2022)
- (31) An Interferometric View of H-MM1. I. Direct Observation of NH₃ Depletion
 J. E. Pineda, J. Harju, P. Caselli, O. Sipilä, M. Juvela, C. Vastel, E. Rosolowsky, A. Burkert, R. K. Friesen, Y. Shirley (+7 co-authors including **D. M. Segura-Cox**)
 AJ, 163, 294 (2022)
- (30) SOLIS. XVI. Mass ejection and time variability in protostellar outflows: Cep E

 A. de A. Schutzer, P. R. Rivera-Ortiz, B. Lefloch, A. Gusdorf, C. Favre, **D. M Segura-Cox**, A. López-Sepulcre, R. Neri, J. Ospina-Zamudio, M. De Simone (+30 co-authors)

 A&A, 662, 104 (2022)
- (29) SOLIS. XV. CH₃CN deuteration in the SVS13-A Class I hot corino
 E. Bianchi, C. Ceccarelli, C. Codella, A. López-Sepulcre, S. Yamamoto, N. Balucani, P. Caselli, L. Podio, R. Neri, R. Bachiller (+5 co-authors including **D. M. Segura-Cox**)
 A&A, 662, 103 (2022)

- (28) Misaligned Rotations of the Envelope, Outflow, and Disks in the Multiple Protostellar System of VLA 1623-2417: FAUST. III
 - S. Ohashi, C. Codella, N. Sakai, C. J. Chandler, C. Ceccarelli, F. Alves, D. Fedele, T. Hanawa, A. Durán, C. Favre (+72 co-authors including **D. M. Segura-Cox**)
 ApJ, 927, 54 (2022)
- (27) The VLA/ALMA Nascent Disk and Multiplicity (VANDAM) Survey of Orion Protostars V. A Characterization of Protostellar Multiplicity
 - J. J. Tobin, S. R. Offner, K. M. Kratter, S. T. Megeath, P. D. Sheehan, L. W. Looney, A. K. Diaz-Rodriguez, M. Osorio, G. Anglada, S. I. Sadavoy (+9 co-authors including **D. M. Segura-Cox**)

ApJ, 925, 39 (2022)

- (26) VLA and NOEMA view of the Bok Globule CB 17: the starless nature of a proposed FHSC candidate S. Spear, M. J. Maureira, H. Arce, J. E. Pineda, M. Dunham, P. Caselli, & D. M. Segura-Cox ApJ, 923, 231 (2021)
- (25) The GRAVITY Young Stellar Object Survey. VI. Mapping the variable inner disk of HD 163296 at sub-au scales
 - J. Sanchez-Bermudez, A. Caratti o Garatti, R. Garcia Lopez, K. Perraut, L. Labadie, M. Benisty, W. Brandner, C. Dougados, P. J. V. Garcia, T. Henning (+46 co-authors including **D. M. Segura-Cox**) A&A, 654, 97 (2021)
- **(24)** *HAWC+/SOFIA Polarimetry in L1688: Relative Orientation of Magnetic Field and Elongated Cloud Structure*
 - D. Lee, M. Berthoud, C.-Y. Chen, E. G. Cox, J. A. Davidson, F. J. Encalada, L. M. Fissel, R. Harrison, W. Kwon, D. Li (+7 co-authors including **D. M. Segura-Cox**)
 ApJ, 918, 39 (2021)
- (23) 870 µm Dust Continuum of the Youngest Protostars in Ophiuchus
 - F. J. Encalada, L. W. Looney, J. J. Tobin, S. I. Sadavoy, **D. M. Segura-Cox**, E. Cox, Z.-Y. Li, & G. Novak

ApJ, 913, 149 (2021)

- **(22)** FAUST. II. Discovery of a Secondary Outflow in IRAS 15398-3359: Variability in Outflow Direction during the Earliest Stage of Star Formation?
 - Y. Okoda, Y. Oya, F. Logan, D. Johnstone, S. Inutsuka, C. Ceccarelli, C. Codella, C. Chandler, N. Sakai, Y. Aikawa (+59 co-authors including **D. M. Segura-Cox**)
 ApJ, 910, 11 (2021)
- (21) Dissecting the Supercritical Filaments Embedded in the 0.5 pc Subsonic Region of Barnard 5
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