Francisca Kemper

Curriculum Vitae

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Institute for Space Sciences (ICE), CSIC,
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Education and Qualifications

2002 **Ph.D. Astronomy** University of Amsterdam, The Netherlands
1997 **M.Sc. Astronomy** Leiden University, The Netherlands

Positions Held

2022 – **ICREA research professor (faculty)**, Institute for Space Sciences (ICE), CSIC, Catalonia, Spain
2018 – 2022 **European ALMA Programme Scientist (faculty)**, European Southern Observatory (ESO), Germany
2010 – 2022 **Research Fellow (faculty)**, Academia Sinica, Institute of Astronomy and Astrophysics (ASIAA), Taiwan
2006 – 2011 **Lecturer of Physics and Astronomy (faculty)**, University of Manchester, UK
2005 – 2007 **Assistant Professor of Astronomy (faculty)**, University of Virginia, USA
2002 – 2005 **Spitzer Fellow (post-doc)**, University of California, Los Angeles (UCLA), USA

Honours, Awards and Fellowships

2017 **Grand Prix Scientifique de la Fondation Franco-Taiwanaise**, Paris, France
2014 **Academia Sinica Research Award for Junior Research Investigators**, Taipei, Taiwan
2008 **Leverhulme Research Fellowship**, taken up at the University of Manchester
2002 **NASA Spitzer Fellowship**, taken up at UCLA

Advisory Panels

2020 – Instrument Steering Committee (ISC), Nederlandse Onderzoeksschool voor Astronomie (NOVA), The Netherlands
2017 – ERC Starting Grant Review Panel, European Research Council
2015 – 2021 Secretary & Steering Committee Member, Division H: Interstellar Matter and Local Universe, International Astronomical Union
2020 Event Horizon Telescope (EHT) Director search committee

Research

- My research interests include the formation and evolution of dust in the interstellar medium of galaxies, in the context of its effect on galaxy evolution. I study the dust properties using infrared and submillimeter observations, both spectroscopy and continuum, using the results from computational and experimental studies. In recent years I have focused on characterizing the life cycle of dust in galaxies, with special emphasis towards the dust production by evolved stars, and its effect on the interstellar dust reservoir in galaxies near and far. I am particularly interested on the nanophysics involved in the growth from molecules to astrophysical silicates, and the lattice displacements caused by cosmic ray irradiation in these silicates. I am also interested in circumstellar environments, in relation to the fate of evolved stars, the evolution of planetary systems, and the associated chemical and physical processes.
- Throughout my astronomy research career, I have been involved in collaborative instrumentation projects, especially related to the Atacama Large Millimetre/Submillimetre Array (ALMA). While at ASIAA in Taiwan, I was the Principal Investigator of the Band 1 Receiver Development project, and co-project manager of the total package of ALMA activities in Taiwan. At ESO in Germany, I took up the role of the European ALMA Programme Scientist. In this role, I provided scientific justification for the ALMA 2030 Development program, and liaised with the science advisory committees. I have also been involved in the James Clerk Maxwell Telescope (JCMT) as the East Asian Observatory chief scientist. Currently, I am a member of the AtLAST consortium, and a member of the science team of the African Millimetre Telescope (AMT), which is part of the Event Horizon Telescope (EHT). On the infrared side my expertise dates back to my Ph.D. project, where I was embedded in the Dutch/Belgian ISO-SWS community, and later my position as Spitzer Fellow, which allowed me to join the IRS instrument team. Most recently, I have been instrumental in establishing the participation of ASIAA/Taiwan in the METIS instrument for ESO's Extremely Large Telescope. I have also been a very active member of the science team for the Space Infrared Telescope for Cosmology and Astrophysics (SPICA), which would be the next far-infrared space-based observatory, but has sadly been cancelled by ESA. In various roles within the SPICA science team since

about 2008, I have worked to engage the community, and contributed to design considerations for the mid-infrared camera. I also played an active role in consortium building, and have contributed to the science case.

- I have authored more than 100 refereed publications in astronomy, which have accumulated over 6000 citations. My h-index is 44. I have given 25 invited, and numerous contributed talks at international conferences to disseminate my results. I have also delivered 24 invited colloquia at institutes around the world. I have organized 18 international conferences on astronomical research and instrumentation topics.
- Since 2005 I have supervised 15 post-doctoral researchers, 6 Ph.D. students, 10 Masters and undergraduate students, several summer students, and 2 research assistants. Of the 21 post-doctoral researchers and Ph.D. students supervised, 18 are still active in astronomy, with 7 holding faculty positions. A further two have left the field and one former post-doc is deceased.

Research income

Since 2004 I have acquired and managed about US$ 24 million in research funding, in many cases jointly. Currently, I am a co-investigator on a grant from the European Commission Horizon 2020, awarded in 2020 to the Atacama Large Aperture Submillimetre Telescope (AtLAST).

Additional Professional Roles

2001 –	Referee for academic journals: MNRAS, ApJ, A&A, Astronomical Review, Advances in Geosciences, Earth Planets Space and ACS Nano
2005 –	Referee for research proposals to funding agencies: NASA, Science and Technology Facilities Council (STFC), German Research Foundation (DFG), Austrian Academy of Sciences (ÖAW), European Space Agency (ESA), The Netherlands Organisation for Scientific Research (NWO), European Research Council (ERC), Ministry of Science and Technology of Taiwan (MoST), Spanish State Research Agency (AEI)
2016 – 2018	Chief Scientist East Asian Observatory, ASIAA, Taipei, Taiwan
2012 – 2018	*Head-of-Nation* and Chief Scientist for SPICA-Taiwan
2012 – 2018	Principal Investigator, Band 1 Receiver Development for ALMA
2011 – 2018	Co-Project Manager ALMA-Taiwan
2006 – 2017	Principal Investigator SAGE-Spec Spitzer Space Telescope Legacy Program
2016	Nomination Committee, Laboratory Astrophysics Division, American Astronomical Society
2016	EHT Time Allocation Committee
2015 – 2016	Chair, JCMT Time Allocation Committee
2015	Time Allocation Committee Telescope Access Program (TAP) for astronomers in China
2012 – 2014	Joint Project Office, SPICA
2013	Judge, Student Paper Competition, Young Scientist Program Committee (YSPC) of the Asia-Pacific Radio Science Conference (AP-RASC'2013), 3 September 2013
2011 – 2013	Taiwanese Time Allocation Committee for the Canadian-French-Hawaiian Telescope (CFHT)
2009 – 2011	JCMT UK Time Allocation Group
2011	Hubble Space Telescope Cycle 19 Time Allocation Committee
2005 – 2008	Member, and chair in cycle 6, Spitzer Space Telescope Time Allocation Committee Cycles 2, 5 and 6
2006	National Optical Astronomical Observatory (NOAO) Time Allocation Committee

Research Funding

2020	**European Commission Horizon 2020, Co-I**, *Towards an Atacama Large Aperture Submillimeter Telescope (AtLAST)*, PI: C. Cicone	
2018	**Ministry of Science & Technology (MoST) Award for Excellent Junior Research Investigators, PI**, *The Nearby Evolved Stars Survey (NESS)*	~US$ 100K
2017	**Academia Sinica Investigator Award, PI**, *PROduction of Dust In GalaxIES (PRODIGIES)*	~US$ 650K
2017	**Ministry of Science & Technology (MoST), Co-PI**, *Phase A study for SPICA mission*, PI: S.-Y. Wang	~US$ 59K
2017	**Ministry of Science & Technology (MoST), Co-PI**, *Atacama Large Millimetre/Submillimetre Array (ALMA): Taiwan plans*, PI: Y.-H. Chu	~US$ 2.0M
2016	**Ministry of Science & Technology (MoST), Co-PI**, *Atacama Large Millimetre/Submillimetre Array (ALMA): Taiwan plans*, PI: Y.-H. Chu	~US$ 3.3M
2015	**Ministry of Science & Technology (MoST) Award for Excellent Junior Research Investigators, PI**, *The life cycle of matter in the Magellanic Clouds*	~US$ 160K
2014	**Ministry of Science & Technology (MoST), Co-PI**, *Atacama Large Millimetre/Submillimetre Array (ALMA): Taiwan plans*, PI: P. T. P. Ho	~US$ 4.7M
2014	**Ministry of Science & Technology (MoST) Award for Excellent Junior Research Investigators, PI**, *The life cycle of matter in the Magellanic Clouds*	~US$ 48K

2012	**Academia Sinica Career Development Award, PI**, *The life cycle of dust in Galaxies*	∼US$ 310K
2012	**NRAO ALMA Development Program, Co-PI**, *ALMA Band-1 Receiver Development Study*, PI: P. T. P. Ho	US$ 100K
2011	**STFC Rolling Grant, Co-I**, *Stars, dust and gas: the life cycle of galaxies*, PI: A. Zijlstra	
2011	**National Science Council Junior Researcher Project Grant, PI**, *The life cycle of matter in the Magellanic Clouds*	∼US$ 50K
2010	**Ministry of Science & Technology (MoST), Co-I**, *Atacama Large Millimetre/Submillimetre Array (ALMA): Taiwan plans*, PI: P. T. P. Ho	∼US$ 11.1M
2009	**STFC Rolling Grant, Co-I**, *From Planck to Planets: Probing the Structure of the Universe*, PI: S. Mao. Award also included 21.1 FTE	∼US$ 230K
2008	**STFC Rolling Grant, Co-I**, *Gas, dust and stars: the life cycle of galaxies*, PI: P. Diamond. Award also included 26.5 FTE	∼US$ 130K
2008	**Leverhulme Research Fellowship, PI**, *Crystallization of silicates in space*	∼US$ 53K
2007	**NASA Spitzer General Observing programs, Cycle 4, PI**, 224 hours of observing time; *SAGE-Spectroscopy: The life cycle of dust and gas in the Large Magellanic Cloud*	US$ 876.2K
2005	**NASA Origins of Solar Systems, Co-I**, *Laboratory infrared spectroscopic studies of cometary dust and comparison with interstellar and circumstellar dust*, PI: L. Keller	US$ 201K
2005	**NASA Spitzer General Observing programs, Cycle 2, Co-I**, 32 hours of observing time; *The dust condensation sequence at low metallicity: AGB stars in NGC 6822*, PI: S. Van Dyk	US$ 33.1K
2004	**NASA Spitzer General Observing programs, Cycle 1, PI**, 10 hours of observing time; *The O-rich condensation sequence at low metallicity: Large Magellanic Cloud AGB and post-AGB stars*	US$ 43.4K
2004	**NASA Spitzer General Observing programs, Cycle 1, Co-I**, 15 hours of observing time; *The dust sequence along the AGB*, PI: J. Blommaert	US$ 11.3K
2004	**NASA Spitzer General Observing programs, Cycle 1, Co-I**, 7.6 hours of observing time; *Dust in the Wind: Mid-Infrared Spectroscopy of Broad Absorption Line Quasars*, PI: S. Gallagher	US$ 8.7K
2002	**NASA Spitzer fellowship, PI**, *The composition and evolution of dust in astrophysical environments*	

Invited Colloquia

Tata Institute for Fundamental Research, Mumbai, India, *The origin of dust in galaxies* (remote delivery due to COVID-19)	11 May 2021
Universidad Nacional Autónoma de México, Morelia, Mexico, *The origin of dust in galaxies* (remote delivery due to COVID-19)	7 May 2020
Universidad de Chile, Santiago, Chile, *The origin of dust in galaxies*	23 January 2020
University of Vienna, Vienna, Austria, *The status of the ALMA observatory and thoughts on the origin of dust in galaxies*	9 December 2019
Joint ALMA Office (JAO) Colloquium, Santiago, Chile, *The production of dust in galaxies*	27 February 2019
Munich Joint Astronomy Colloquium, ESO, Garching, Germany, *The production of dust in galaxies*	20 December 2018
Max Planck Institute for Radio Astronomy, Bonn, Germany, *The production of dust in Galaxies*	13 July 2018
Max Planck Institute for Astronomy, Heidelberg, Germany, *The production of dust in Galaxies*	22 June 2018
National Central University, Jhongli, Taiwan, *The production of dust in Galaxies*	7 April 2017
University of California, Los Angeles, USA, *Dust production by evolved stars in the Magellanic Clouds and other galaxies*	12 October 2016
Shanghai Astronomical Observatory, Shanghai, China, *Dust production by evolved stars in the Magellanic Clouds and other galaxies*	18 November 2015
National Astronomical Observatory of China, Beijing, China, *Dust production by evolved stars in the Magellanic Clouds and other galaxies*	22 April 2015
National Tsing Hua University, Hsinchu, Taiwan, *Fullerenes around C-rich evolved stars in the Milky Way and Magellanic Clouds*	11 April 2014
Institut de Ciències de l'Espai, IEEC-Bellaterra, Barcelona, Catalonia, *Dust production and mineralogy in galaxies*	12 June 2013
National Central University, Jhongli, Taiwan, *Written in stone: Dust formation in the universe*	15 April 2011
National Taiwan Normal University, Taipei, Taiwan, *Written in stone: Dust formation in the universe*	12 April 2011
National Tsing Hua University, Hsinchu, Taiwan, *Written in stone: Dust formation in the universe*	1 April 2011
Leiden Observatory, The Netherlands, *The dusty interstellar medium of galaxies*	25 February 2010
University College London, UK, *The life cycle of dust in galaxies*	16 November 2009
University of Amsterdam, The Netherlands, *Surveying the Agents of Galaxy Evolution: The Spitzer Legacy of the Magellanic Clouds*	30 January 2009
University of Manchester, UK, *Dust evolution in galaxies*	21 February 2007
University of Nottingham, UK, *Dust evolution in galaxies*	24 January 2007

Department of Terrestrial Magnetism (DTM), Carnegie Institute, Washington, DC, USA, 14 December 2005
Astromineralogy of stardust: dust properties in the Galaxy... and beyond
Space Telescope Science Institute, Baltimore, MD, USA, *Oxygen-rich dust in astrophysical environments* 15 October 2003

Invited Talks at Conferences

Evolved Stars and their Circumstellar Environments, virtual, SOFIA science center: 14 December 2021
Infrared and submillimeter observations of the circumstellar environments of evolved stars: The formation and properties of astrophysical dust
Galaxy Evolution: From Cosmic Dawn to the Milky Way with the ESA Euclid mission and ESO telescopes, Madrid, Spain: *Submm follow-up facilities* (cancelled due to COVID-19) 21–25 September 2020
European Astronomical Society Annual Meeting, Leiden, The Netherlands: *ESO report* (plenary, remote delivery due to COVID-19) 3 July 2020
Celebrating the first 40 years of Alexander Tielens' contribution to science: the physics and chemistry of the ISM, Avignon, France: *The Production of Dust In Galaxies* 2 September 2019
The European Week of Astronomy & Space Science (EWASS) 2019, Lyon, France: talk 1: *The prospective for ALMA in the 2030s*; talk 2: *ESO report* (plenary) 28 June 2019
IAU General Assembly Focus Meeting 11 – JWST: Launch, Commissioning and Cycle 1 Science Vienna, Austria: *JWST: The evolvings interstellar medium in galaxies* 20 August 2018
CPHDUST2018: Cosmic dust: origins, applications & implications, Copenhagen, Denmark: *Conference summary* 15 June 2018
JCMT Users' Meeting 2017, Nanjing, China: *Future science directions at the James Clerk Maxwell Telescope* 14 February 2017
JCMT Users' Meeting 2016, Mitaka, Japan: *Writing a good observing proposal* 19 April 2016
12th Asia-Pacific Regional IAU Meeting (APRIM), Daejeon, Korea: *The dust production by evolved stars in the Magellanic Clouds* 19 August 2014
9th East Asian Meeting on Astronomy (EAMA), National Central University, Jhongli, Taiwan: 14 October 2013
The Mid-Infrared Camera and Spectrometer for SPICA: general overview and Taiwan's contribution
Asia-Pacific Radio Science Conference (AP-RASC '13), Taipei, Taiwan: *Current Development For the Atacama Large Millimeter/Submillimeter Array: The 35-50 GHz Band 1 Receiver* 5 September 2013
From Exoplanets to Distant Galaxies: SPICA's New Window on the Cool Universe, Tokyo, Japan: *ISM and star formation* 20 June 2013
Silicon in Space, Villa Vigoni, Lake Como, Italy: *Silicates in galaxies: Insights from extreme environments* 17 May 2012
The Mass-Loss Return from Stars to Galaxies, Space Telescope Science Institute, Baltimore, MD, USA: 29 March 2012
The mineralogy of the dust returned to the interstellar medium of the Magellanic Clouds
8th Annual Meeting of the Asia Oceania Geosciences Society, Taipei, Taiwan: *The life cycle of dust in the Magellanic Clouds* 11 August 2011
Herschel and the characteristics of dust in galaxies, Leiden, The Netherlands: *Dust in extreme environments* 4 March 2011
Physics Society of the R. O. C., Taipei, Taiwan: *The life cycle of dust and gas in the Magellanic Clouds* 26 January 2011
Cosmo-, Geo- and Environmental Research with NanoSIMS, Taipei, Taiwan: *Interstellar dust* 18 January 2011
215th meeting of the American Astronomical Society, Washington, DC: *The mineralogical evolution of dusty stars* 6 January 2010
Oort workshop in honor of Prof. Bruce Draine, Leiden, The Netherlands: *Extragalactic dust* 26 June 2009
Hot and Cool: Bridging the gaps in stellar evolution, Pasadena, CA, USA: *The mineralogy as an evolutionary clock* 12 November 2008
ISO Legacy Colloquium, Madrid, Spain: *Silicates through the eye of ISO* 13 December 2006
Spitzer's view on mass-losing AGB stars, Leiden, The Netherlands: *Spitzer IRS observations of evolved stars in the Large Magellanic Cloud* 2 December 2005
Workshop on oxygen in the earliest Solar System, Gatlinburg, TN, USA: *The formation and processing of interstellar oxygen-rich dust* 19 September 2005
Spitzer Fellow Symposium, Pasadena, CA, USA: *Dust composition: Probing the physical conditions in the ISM and the Red Rectangle* 29 March 2005
Origin and evolution of interstellar silicates, Leiden, The Netherlands: *Crystalline silicates in the spectra of O-rich AGB stars* 17 April 2001

Conference Organization

ESO@60: A stairway to the Universe, Symposium S14, EAS 2022,
Valencia, Spain, 30 June–1 July 2022

The golden decade of infrared astrophysics, Symposium S15, EAS 2022,
Valencia, Spain, 27–28 June 2022
Reproducibility and open science in astronomy (ROSA2022),
Santiago, Chile (virtual), 10–12 May 2022
IAU Symposium 366: The origin of outflows in evolved stars
Leuven, Belgium (hybrid: virtual/in-person), 1–6 November 2021
The ALMA 2030 Vision: A next generation of front-end receivers
Garching, Germany (virtual), 27–30 September 2021
The ALMA 2030 Vision: Design considerations for digitizers, backend and data transmission system
Mitaka, Japan (virtual), 14–16 October 2020
The ALMA 2030 Vision: Design considerations for the next ALMA correlator
Charlottesville, Virginia, USA, 11–13 February 2020
ALMA 2019: Science results and cross-facility synergies (SOC chair)
Cagliari, Italy, 14–18 October 2019
Symposium 7, EWASS 2019: Cosmic dust (r)evolution
Lyon, France, 24–25 June 2019
ALMA Development Workshop
Garching, Germany, 3–5 June 2019
SPICA 2019: Exploring the Infrared Universe: The Promise of SPICA
Crete, Greece, 20–23 May 2019
IAU Symposium 343: Why Galaxies Care about AGB stars. A continuing challenge through cosmic time
Vienna, Austria, 20–23 August 2018
Cosmic Dust: origin, applications & implications
Copenhagen, Denmark, 11–15 June 2018
The Life Cycle of Dust in the Universe: Observations, Theory, and Laboratory Experiments (SOC chair)
Taipei, Taiwan, 18–22 November 2013
ESO workshop on The Deaths of Stars & the Lives of Galaxies
Santiago, Chile, 8–12 April 2013
Transformational Science with ALMA: From Dust to Rocks to Planet Formation and Evolution of Planetary Systems
Kona, Hawaii, USA, 8–12 April 2013
The Red Rectangle Meeting (SOC chair)
Charlottesville, Virginia, USA, 23–25 May 2006
Herbig Ae/Be star meeting
Amsterdam, The Netherlands 2002

Supervision of Junior Researchers

Post-docs and support scientists:

Dr. Sascha Zeegers (ASIAA)	since 2019
Dr. Jonathan Marshall (ASIAA)	since 2017
Dr. Alfonso Trejo (ASIAA; with C. F. Lee/S. Takakuwa)	since 2011
Dr. Lapo Fanciullo (ASIAA)	2017 – 2022
Dr. Peter Scicluna (ASIAA)	2015 – 2019
Dr. Sofia Wallström (ASIAA)	2016 – 2018
Dr. Xiaohu Li (EACOA fellow; National Astronomical Observatory China/ASIAA; with G. Zhao)	2015 – 2018
Dr. Sundar Srinivasan (ASIAA)	2012 – 2018
Dr. Jesus Toala (ASIAA; with Y.-H. Chu)	2016 – 2017
Dr. Naslim Neelamkodan (ASIAA)	2013 – 2016
Dr. Masaaki Otsuka (ASIAA)	2011 – 2014
Dr. Ji Yeon Seok (ASIAA; with H. Hirashita)	2012 – 2014
Dr. Ronny Zhao-Geisler (ASIAA/National Taiwan Normal University (NTNU))	2012 – 2013
Dr. Paul Ruffle (Manchester)	2011 – 2013
Dr. Paul Woods (Manchester)	2008 – 2011

Ph.D. students:

Thavisha Dharmawardena (ASIAA/National Central University (NCU))	2015 – 2019
Olivia Jones (Manchester)	2009 – 2013
Sean Chapman (Manchester/ASIAA; with I. Lyon)	2009 – 2012
Jarron Leisenring (Virginia)	2005 – 2007
Gail Zasowski (Virginia)	2005 – 2007
Sabrina Pakzad (Virginia)	2005

Research assistants:

Rita Peng (ASIAA)	2014 – 2015
Thomas Lai (ASIAA)	2013 – 2014

Masters and undergraduate students:

Bhavna Adwani, masters student (Autonomous University Barcelona)	since 2021
Chi-Jui Chen, undergraduate student (National Taiwan University (NTU); with O. Morata)	2016 – 2020
Kai-Erh Yeh, masters student (NTU; with J. Marshall)	2017 – 2019
Mei-Chun Lin, masters student (NTU)	2011 – 2014
Rita Peng, masters student (NTNU; with S. Foucaud)	2012 – 2013
Yao-Lun Yang, undergraduate student (NTU)	2011 – 2012
Catherine McGuire, masters student (Manchester)	2008 – 2010
Lisette Sibbons, masters student (Manchester)	2007 – 2009
Antonio Pasqua, masters student (Manchester)	2008 – 2009
Parin Tanawong, masters student (Manchester)	2007 – 2008
Supervision of several students in the ASIAA summer student program	2011 – 2018

University Teaching

2011 – 2015	*The Interstellar Medium*, Academia Sinica, Taiwan
2011	*Dust Astrophysics*, Academia Sinica, Taiwan
2009	*Frontiers of Astrophysics*, University of Manchester, UK
2007 – 2009	*Interstellar Physics*, University of Manchester, UK
2007 – 2008	Third year physics spectroscopy laboratory, University of Manchester, UK
2006 – 2008	First year physics tutorials, University of Manchester, UK
2005 – 2006	*Introduction Sky and Solar System*, University of Virginia, USA
2005	*Topics in Astronomy*, University of Virginia, USA
1998 – 2001	Teaching assistant, University of Amsterdam, Netherlands

Departmental and Institutional Roles

2018 – 2022	Team leader, European ALMA Science Team, ESO
2011 – 2012	Co-organizer, Summer Student Progam, ASIAA
2007 – 2010	*Life Cycle of Matter* Research Theme Coordinator, University of Manchester
2007 – 2010	Vice-Chair and later Chair, Research Forum, JBCA, University of Manchester
2006	Member, Faculty Hiring Committee, University of Virginia
2005 – 2006	Colloquium organizer, University of Virginia
2005	Member, Graduate Admissions Committee, University of Virginia
2003 – 2004	Post-doc representative, Division of Astronomy, UCLA
1999 – 2002	Organizer, Circumstellar Material & Stellar Evolution group meetings, University of Amsterdam
1994 – 1997	Undergraduate representative, Leiden Observatory

Community Involvement and Public Outreach

1995 –	Various public lectures
2011	Explore IAA, Explore Universe: Q&A with middle school and high school students
2005 – 2006	Lectures at the McCormick observatory open nights, University of Virginia
2003	Sally Ride Science Fair for middle school girls, Los Angeles
1999 – 2002	Guest lectures in astrophysics, various high schools, Netherlands
2001	Introductory astronomy course for the general public, Public Observatory Copernicus, Haarlem, Netherlands
1998 – 2000	Annual open days of the Astronomical Institute of the University of Amsterdam
1995 – 1997	Guided tours at the Old Observatory, Leiden University

Languages

Dutch	native
English	full professional
German	professional working
Catalan	professional working
Chinese: Mandarin	limited working
French	limited working
Portuguese	elementary

Professional Memberships

European Astronomical Society (EAS)	2018 – current
International Astronomical Union (IAU)	2012 – current
American Astronomical Society (AAS)	2003 – current

Publications

Names of members of my research group are printed in **bold face**. Additional names in the et al. section. Papers with up to 10 authors have all authors listed, and for papers with more than 10 authors, the author list is truncated after three authors.

Publications currently under Review

1. Berné, O., Habart, É., Peeters, E., et al. PDRs4All: A JWST Early Release Science Program on radiative feedback from massive stars. *submitted to PASP* (2022). arXiv: 2201.05112.
2. **Marshall, J. P.**, Chavez-Dagostino, M., Sanchez-Arguelles, D., et al. LMT/AzTEC observations of Vega. *submitted to MNRAS* (2022).
3. Tahani, M., Bastien, P., Furuya, R. S., et al. JCMT BISTRO observations: Magnetic field morphology of bubbles associated with NGC 6334. *submitted to ApJ* (2022).

Peer-reviewed Publications

1. Barman, S., Neelamkodan, N., Madden, S. C., Sewilo, M., **Kemper, F.**, Tokuda, K., Sanyal, S., and Onishi, T. A study of photoionized gas in two HII regions of the N44 complex in the LMC using MUSE observations. *ApJ* (2022). in press, (18 pp.) arXiv: 2204.01293.
2. **Fanciullo, L.**, **Kemper, F.**, Pattle, K., et al. The JCMT BISTRO Survey: multiwavelength polarimetry of bright regions in NGC 2071 in the far-infrared/submillimetre range, with POL-2 and HAWC+. *MNRAS* **512**, 1985-2002 (2022).
3. Kwon, W., Pattle, K., Sadavoy, S., et al. B-fields in Star-forming Region Observations (BISTRO): Magnetic Fields in the Filamentary Structures of Serpens Main. *ApJ* **926**, 163 (2022). (18 pp.) arXiv: 2201.05059.
4. **Scicluna, P.**, **Kemper, F.**, McDonald, I., et al. The Nearby Evolved Stars Survey II: Constructing a volume-limited sample and first results from the James Clerk Maxwell Telescope. *MNRAS* **512**, 1091-1110 (2022). arXiv: 2110.12562.
5. Agliozzo, C., Phillips, N., Mehner, A., Baade, D., Scicluna, P., **Kemper, F.**, Asmus, D., de Wit, W.-J., and Pignata, G. The contribution by Luminous Blue Variable stars to the dust content of the Magellanic Clouds. *A&A* **655**, A98 (2021). (37 pp.) arXiv: 2109.04093.
6. Arzoumanian, D., Furuya, R. S., Hasegawa, T., et al. Dust polarized emission observations of NGC 6334. BISTRO reveals the details of the complex but organized magnetic field structure of the high-mass star-forming hub-filament network. *A&A* **647**, A78 (2021). (29 pp.) arXiv: 2012.13060.
7. Eswaraiah, C., Li, D., Furuya, R. S., et al. Revealing the diverse magnetic field morphologies in Taurus dense cores with sensitive sub-millimeter polarimetry. *ApJ* **912**, L27 (2021). (15 pp.) arXiv: 2103.02219.
8. Jones, O. C., Nally, C., Sharp, M. J., McDonald, I., Boyer, M. L., Meixner, M., **Kemper, F.**, Ferguson, A. M. N., Goldman, S. R., and Rich, R. M. Infrared variable stars in the compact elliptical galaxy M32. *MNRAS* **504**, 565-575 (2021). arXiv: 2103.15857.
9. Lyo, A. .-R., Kim, J., Sadavoy, S., et al. The JCMT BISTRO Survey: An 850/450 μm Polarization Study of NGC 2071IR in Orion B. *ApJ* **918**, 85 (2021). (22 pp.) arXiv: 2109.13543.
10. Ngoc, N. B., Diep, P. N., Parsons, H., et al. Observations of magnetic fields surrounding LkHα 101 taken by the BISTRO survey with JCMT-POL-2. *ApJ* **908**, 10 (2021). (20 pp.) arXiv: 2012.04297.
11. Smith, M. W. L., Eales, S. A., Williams, T. G., et al. The HASHTAG project: The first submillimeter images of the Andromeda Galaxy from the ground. *ApJS* **257**, 52 (Dec. 1, 2021). (26 pp.) arXiv: 2110.00011.
12. Doi, Y., Hasegawa, T., Furuya, R. S., Coudé, S., Hull, C. L. H., Arzoumanian, D., Bastien, P., Chen, M. C.-Y., Di Francesco, J., Friesen, R., Houde, M., Inutsuka, S.-i., Mairs, S., Matsumura, M., Onaka, T., Sadavoy, S., Shimajiri, Y., Tahani, M., Tomisaka, K., Eswaraiah, C., Koch, P. M., Pattle, K., Won Lee, C., et al. The JCMT BISTRO Survey: Magnetic Fields Associated with a Network of Filaments in NGC 1333. *ApJ* **899**, 28 (2020). (23 pp.) arXiv: 2007.00176.
13. Eden, D. J., Moore, T. J. T., Currie, M. J., et al. CHIMPS2: Survey description and ^{12}CO emission in the Galactic Centre. *MNRAS* **498**, 5936-5951 (2020). arXiv: 2009.05073.
14. **Fanciullo, L.**, **Kemper, F.**, **Scicluna, P.**, **Dharmawardena, T. E.**, and **Srinivasan, S.** Systematic errors in dust mass determinations: insights from laboratory opacity measurements. *MNRAS* **499**, 4666-4686 (2020). arXiv: 2009.10304.
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