

Dr. Kathryn Kreckel

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Education

PhD in Astronomy	Columbia University	2006-2011
MS, MPh in Astronomy	Columbia University	2006-2008
AB in Mathematics and Astronomy	UC Berkeley	2001-2005

Employment

Emmy Noether Group Leader	Heidelberg University	2019-present
Postdoctoral Researcher	MPIA	2011-2019
6 month parental leave, 6 month part-time		2015
6 month parental leave, 6 month part-time		2017

Research Interests

ISM physics in nearby galaxies, ISM abundances, Stellar Feedback, Galaxy evolution, Star formation, Low density environments, Void galaxies

Selected Talks/Colloquia in the Past 5 Years

“Resolving the Baryon Cycle within Nearby Galaxies”
ECAP Seminar, Erlangen, DE (2023)

“Relating metallicity variations to feedback processes in nearby galaxies”
Charting the metallicity evolution history of the Universe, Catania, Italy (2022)
A holistic view of stellar feedback and galaxy evolution, Ascona, Switzerland (2022)

“Mapping the ionized ISM in nearby galaxies”
Colloquium, NYU, NYC, USA (2021)
Colloquium, Bologna, Italy (2021)
Colloquium, University of Maryland, Baltimore, USA (2021)
Colloquium, Stockholm University, Stockholm, Sweden (2020)
Colloquium, Observatorio Astronómico Nacional, Madrid, Spain (2019)
SFB Colloquium, University of Bonn, Germany (2019)

“The Local Volume Mapper in SDSS-V: Connecting Stellar Feedback with the ISM in the Milky Way and Local Group”
European Week of Astronomy and Space Sciences, Lyon, France (2019)
15th Potsdam Thinkshop, Potsdam, Germany (2018)

University Service/Committees

Research Council, Representative for Junior Researchers, Heidelberg University, Germany (2021-present)
Equal Opportunity Officer at MPIA (2014-2016)

Teaching

Bachelors & Masters Seminars, Heidelberg University (2020-present)
'Physics and Chemistry of the ISM', lecturer, Heidelberg University (2022)
Supervisor to PhD students, Heidelberg University: Jing Li (2021-present); Fabian Scheuermann (2019-present); Neven Tomicic (2015-2019)
Supervisor to 1 BA and 2 MA students, Heidelberg University: Emma Zavodnik (BA, 2022); Shuverthi De Sarkar (MA, expected 2023); Mar Canal i Saguer (MA, expected 2023)
Observational Astronomy, Teaching Assistant, Columbia University (Spring 2009)
Astronomy Lab Instructor, Columbia University (2006-2008)

Scientific Service

Survey Scientist, SDSS V Local Volume Mapper (LVM) (2017-present)
Science Working Group Lead, PHANGS (2015-present)
Heidelberg Joint Astronomy Colloquium co-organizer (2021-present)
Organizer, EAS 2022 Valencia, special session "Connecting stellar sources and the ionised ISM" (2022)
SOC, Green Bank Workshop "Warm Ionized Medium (WIM) in Galaxies" (2019)
Organizer, EWASS symposium "Resolving the ionized ISM" (2019)
SOC, EWASS session "Comparing simulations and observations of the varying scales of star formation" (2017)
Co-organizer, MPIA summer conference, "A 3D View on Galaxy Evolution" (2015)
Public outreach, MPIA Open Day (Summer 2012)
Australian National University thesis examiner (2019)
Referee for peer-review journals: MNRAS, A&A, ApJ, Nature, Nature Astronomy
Proposal reviewer: CFHT, HST, ESO
Grant reviewer: DFG, Polish National Science Center

Grants

PI of ERC Starting Grant "ISM-METALS: Tracking galaxy evolution with precise and accurate metal abundances in the interstellar medium" at Heidelberg University, 5 year funding totaling 1.5 million Euro (starting October 2023)
PI of DFG project within the Collaborative Research Center (Sonderforschungsbereich; SFB) 881 "The Milky Way System" at Heidelberg University, 3 year postdoc funding totaling 272,000 Euro (2020-2022)
PI of DFG Emmy Noether Research Group "Resolving the Baryon Cycle in Nearby Galaxies", 6 year funding totaling 1.7 million Euro (2019-present)
PI of DFG project "The Reach of Stars", full time salary for 3yrs for myself and a PhD student totaling 370,000 Euro (2015-2018)
DFG visitor and conference funds totaling 14,000 Euro (2013-2015)

Publication Citation Analysis (NASA ADS, February 2023)

92 refereed papers, 3618 citations, $h = 33$ (i.e., 33 papers with ≥ 33 citations)
14 1st author refereed papers, 724 citations, $h = 13$