Dr Rebecca **McElroy**

Research Fellow, School of Maths and Physics, University of Queensland, Australia

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Summary

- Research interests: **active galactic nuclei, merging galaxies, galaxy evolution.**
- Vast experience with spectroscopic data at all levels, from preparation of observations to data reduction to in-depth data analysis including comparison to theoretical simulations.
- Active member of multiple world-renowned astronomical surveys using revolutionary instruments.
- I am passionate about **teaching**, **outreach**, and **equity.**

Academic history

University of Queensland — *Brisbane, Australia*

Research Fellow — *2022 - present*

- Supervisor: Prof. Tamara Davis
- Leading the Close AGN Reference Survey, a survey of nearby AGN observed across the electromagnetic spectrum. Continuing work on galaxy pair merger simulations.

University of Sydney — *Sydney, Australia*

Postdoctoral research associate — *2020 - 2022*

- Group leader: Prof. Scott Croom
- Working on integral field spectroscopic data of local active galaxies and state-of-the-art galaxy pair merger simulations with the FIRE simulations team.

Max Planck Institute for Astronomy — *Heidelberg, Germany*

Postdoctoral researcher — *2017 - 2020*

- Group leader: Prof. Eva Schinnerer
- Led the observation preparation and data processing effort for the PHANGS-MUSE Survey large programme on the European Southern Observatory's Very Large Telescope.

University of Sydney — *Sydney, Australia*

PhD in Astrophysics — *2014 - 2017*

- PhD Supervisors: Prof. Scott Croom & Dr. Michael Pracy
- Thesis: *Investigating the host galaxies of luminous AGN in the local universe with integral field spectroscopy*

University of Sydney

BSc and Graduate Diploma of Science — *2010 - 2013*

- First-Class honours
- Major in Physics, minors in Mathematics and Ancient History
- Honours Supervisors: Dr. Scott Croom & Dr. Michael Pracy
- Honours Thesis: *The Host Galaxies of Active Galactic Nuclei: Winds, Morphology, and Star Formation.*

Referees

- **Prof. Scott Croom**, University of Sydney: scott.croom@sydney.edu.au
- **Dr Grant Tremblay**, collaborator, Harvard University: gtremblay@cfa.harvard.edu

Honours & Awards

2018	**Best PhD thesis**, School of Physics, University of Sydney	
2016	**Best student poster**, The Changing Face of Galaxies Conference	*Tasmania, Australia*
2016	**Best student talk**, Annual meeting of the Astronomical Society of Australia	*Sydney, Australia*
2015	**Australian Postgraduate Award (APA) Scholarship**, University of Sydney	
2014	**Best poster prize**, CAASTRO annual retreat	*Mooloolaba, Australia*

Astronomical Observing Experience

- **Primary and Co-Investigator of many successful proposals to competitive international facilities including:**
  - Space-based telescopes - the Hubble Space Telescope and the Chandra X-ray Observatory.
  - European Southern Observatory facilities - multiple instruments on the Very Large Telescope in Chile and the ALMA array.
  - The US's National Radio Astronomy Observatory.
  - The Anglo-Australian Telescope and 2.3m ANU Telescope in Northern NSW.
- **Experienced user of integral field spectrographs**
  - Designed 100+ hours worth of observations on the Very Large Telescope.
  - Many years experience reducing integral field spectroscopic data and liaising with observatories.
  - Observing experience with MUSE, SAMI, SPIRAL, WiFeS, and VIMOS integral field spectrographs.
  - Written software to study complex emission lines, using frequentist and Bayesian methods (MCMC, Nested Sampling).
  - Experienced with absorption line modelling (e.g.PPXF), such as stellar populations and kinematics.
- **Experienced user of data from the ALMA sub-mm array**
  - Written analysis software for CO emission lines.
  - Used various tools to study the properties of CO emission including CASA, SCOUSE, and Glue.
- **Capable observer**. I have spent many nights performing primarily optical observations, including both spectroscopy and photometry.
  - 25+ nights on the Anglo-Australian Telescope.
  - 4 nights on the DuPont telescope at Las Campanas Observatory.
  - 16 hours on the Australian Telescope Compact Array.
- Experienced with **galaxy simulations** and how to compare them to observations. Led a paper applying observational techniques to a set of zoom-in simulations of galaxy collisions.

Teaching & Outreach

Student mentorship

- Experienced surrogate supervisor to the students in my group. In Germany fixed-contract staff cannot supervise students officially, but the primary day-to-day supervision is handled by postdocs in the group. During my time in Heidelberg I played a significant role in the supervision of the two PhD students in my group. This included:
  - Day-to-day help with coding or conceptual issues.
  - Reading, editing, and helping structure papers.
  - Editing conference talks and posters.
  - Helping with job applications and proposals.
- During my postdoc in Sydney I began an initiative to teach students how to present effective research talks. This has involved one-on-one zoom sessions where we go over their work and figure out how best to present it to a diverse audience.
- Since arriving at UQ I have taken on an honours student, and been a non-expert examiner for an honours project.

Undergraduate astronomy and physics

- **I have considerable teaching experience in the School of Physics at the University of Sydney both at a lower level when I was a PhD student, and at a coordinating level as a postdoc.** As a postdoc I have been responsible for one of the first year astronomy units. While as a student I taught both first year physics and astronomy tutorials, at a variety of levels.
- My responsibilities over the years have included:
  - Designing and presenting lectures.
  - Tutorials, in both a managerial and subordinate role.
  - Designing tutorials.
  - Running telescope nights for astronomy courses.
  - Designing and marking exams.
- At UQ I have guest lectured on my research in PHYS4080.

Outreach activities

- Appeared on the **ABC Australia's national televised news** (16/09/2016) and ABC 702 (16/09/2016) and 744 (19/09/2016) **radio** to discuss the discovery of a 'starving' supermassive black hole.
- Contributed significantly to CAASTRO and ESO press releases which resulted in over 15 online news articles.
- Participated in the **CAASTRO Centre of Excellence Astronomer in Residence** program. This role involved assisting with night tours, telescope operation, giving public talks, and public Q&A sessions.
- Worked with school teachers to help explain astrophysical concepts to children and to work as a mentor for young girls in rural schools.
- Managed the official SAMI Galaxy Survey twitter account.

Other roles

I am a dynamic, valued, and engaged member of my professional communities. I am particularly passionate about diversity and equity and improving the culture of our workplaces. This year I have been working to revamp our departmental meetings to improve engagement and increase the value, particularly students, get from these meetings.

Equity and diversity

University of Sydney

Active member of the Physics Equity and Access Committee, which aims to improve the culture and diversity of the School of Physics and design ways to increase equity in the school.

Max Planck Institute for Astronomy

I served as an equal opportunity officer – an advocate for minority groups, particularly women, in the work environment. This involves:

- Participating in all hiring committees
- Organising diversity seminars and workshops
- Devising diversity initiatives and strategies
- Provide assistance in cases of unequal treatment

Seminar and moring tea coordination

UQ Astronomy & Sydney Institute for Astronomy

- Coordination weekly departmental morning tea meetings. This includes scheduling speakers, hosting the meetings, and facilitating discussions.
- Organised department seminars, introduced and hosted the speakers.

Conference organisation

I have been part of local organising committees, including several workshops and was the primary organiser of a large collaboration meeting for PHANGs.

- Programme design and logistical organisation.
- Venue booking, catering, dinner organisation.
- Chairing conference sessions.

Skills

Computing and programming

- Experienced in a range of programming languages and computer systems.
  - Python, IDL, SQL, Bash/C-shell scripting
  - Mac OS, Linux, Windows
  - HTML, CSS, PHP
  - Cluster-computing and parallel programming
- Trained at a graduate level in frequentist and Bayesian statistical methods.

Languages

- Native English speaker, proficient in German and French.

Professional affiliations

- **The Close AGN Reference Survey** - I am the lead of this multi-wavelength survey of nearby type 1 active galaxies based on MUSE, Chandra, VLA, and SOFIA data.
- **PHANGS collaboration** - Physics at High Angular resolution in Nearby Galaxies, aims to understand how physics at small scales affects galaxies as a whole using combined large programmes from MUSE and ALMA.
- **The SAMI Galaxy Survey** - the first massively multiplexed spatially resolved survey of galaxies, based at the Anglo-Australian Telescope.
- **The Astronomical Society of Australia** - full member.

Talks

I am an **experienced public speaker.** I have presented talks at **seven international conferences**, given colloquia at **many institutions across the world**, and presented **several outreach talks** in addition to several **radio and TV interviews.** Below is an abbreviated list of talks I have given.

1. *'Understanding active galaxies'*, **invited seminar**, University of Southern Queensland, Brisbane, 2022
2. *'Why I work on galaxy simulations'*, **seminar**, University of Queensland, Brisbane, 2021
3. *'PHANGs: star formation and quenching across galaxy disks seen by MUSE and ALMA '*, Life and death of star-forming galaxies, **conference talk**, Perth, 2019
4. *'A MUSE-ALMA view of the physics of star formation and feedback at high angular resolution in nearby galaxies'*, ESO-Australia conference, **conference talk**, Sydney, 2019
5. *'Physics at High Angular resolution in Nearby Galaxies: A MUSE and ALMA view of the outflow in NGC1672'*, **colloquium**
   – European Southern Observatory, Santiago, 2018
   – Pontificia Universidad Católica de Chile, Santiago, 2018
   – Universidad Diego Portales, Santiago, 2018
6. *'Physics at High Angular resolution in Nearby Galaxies: A MUSE and ALMA view of the outflow in NGC1672'*, AIP Thinkshop, **conference talk**, Potsdam, 2018
7. *'Active galaxies in the local universe'*, ASTRON, **invited colloquium**, Groningen, 2018
8. *'Ongoing monitoring of changing look AGN Mrk1018'*, **colloquium**, European Southern Observatory, Garching, 2018
9. *'The Close AGN Reference Survey: Mrk 1018 returns to the shadows'*, **colloquium**
   – CSIRO Astronomy and Space Science, Sydney, 2016
   – Northwestern University, Chicago, 2016
10. *'Mrk 1018 returns to the shadows'*, **workshop talk**, Gas Accretion onto Galaxies, Sydney, 2016
11. *'QSO returns to the shadows after 30 years as a Seyfert 1'*, **conference talk**, Annual Meeting of the Astronomical Society of Australia, Sydney, 2016
12. *'Kinematics of type II AGN: Winds, Shocks, and Mergers'*, **colloquium**, European Southern Observatory, 2016
13. *'SAMI Galaxy Survey: Kinematics, Outflows, and AGN'*, **colloquium**
   – European Southern Observatory, Garching, 2016
   – Durham University, 2016
14. *'Host galaxies of luminous type II AGN'*, **conference talk**, 227th Meeting of the American Astronomical Society, Florida, 2016
15. *'SAMI Galaxy Survey: Kinematics, Outflows, and AGN'*, **colloquium**
   – Ohio State University, 2015
   – University of Wisconsin, 2015
   – University of Illinois, 2015
16. *'Accreting super-massive black holes: The monsters at the centres of galaxies'*, **outreach talk**, Uluru, 2015
17. *'Winds and shocks in luminous type II AGN'*, **conference talk**, Black Hole Accretion and AGN Feedback, Shanghai, 2015
18. *'Feedback in luminous type II AGN: winds, star formation, and morphology'*, **conference talk**, Powerful AGN and their Host Galaxies, Port Douglas, 2014

Publications

I have a **h-index of 19** and my publications have a total of **1,620 citations** (from the NASA Astrophysics Data System), each paper having an average of 48.8 citations (Scopus). 61% of my publications are in the top 10% of most cited publications in the world, and two of my first author papers have 91 and 73 citations respectively.

1. ***The observability of galaxy merger signatures in nearby gas-rich spirals***,
   Monthly Notices of the Royal Astronomical Society, 09/2022, **McElroy, R.**, Bottrell, C., Hani, M.H., Moreno, J., Croom, S.M., Hayward, C.C., Twum, A., Feldmann, R., Hopkins, P.F., Hernquist, L., and Husemann, B., **Citations - 3**
2. ***The Close AGN Reference Survey (CARS): Data Release 1 and Beyond***,
   The Messenger, 06/2022, **McElroy, R.**, Singha, M., Husemann, B., Davis, T.A., Combes, F., Scharwächter, J., Smirnova-Pinchukova, I., Pérez Torres, M., Gaspari, M., Winkel, N., Bennert, V.N., Krumpe, M., Urrutia, T., and Neumann, J., **Citations - 0**
3. ***The Close AGN Reference Survey (CARS). Mrk 1018 returns to the shadows after 30 years as a Seyfert 1***,
   Astronomy and Astrophysics, 09/2016, **McElroy, R.**, Husemann, B., Croom, S.M., Davis, T.A., Bennert, V.N., Busch, G., Combes, F., Eckart, A., Perez-Torres, M., Powell, M., Scharwächter, J., Tremblay, G.R., and Urrutia, T., **Citations - 91**
4. ***IFU observations of luminous type II AGN - I. Evidence for ubiquitous winds***,
   Monthly Notices of the Royal Astronomical Society, 01/2015, McElroy, R., Croom, S.M., Pracy, M., Sharp, R., Ho, I.-T., and Medling, A.M., **Citations - 73**
5. ***The Close AGN Reference Survey (CARS). A parsec scale multi-phase outflow in the super-Eddington NLS1 Mrk 1044***,
   arXiv e-prints, 11/2022, Winkel, N., Husemann, B., Singha, M., Bennert, V.N., Combes, F., Davis, T.A., Gaspari, M., Jahnke, K., **McElroy, R.**, O'Dea, C.P., and Pérez-Torres, M.A., **Citations - 0**
6. ***Environmental dependence of the molecular cloud lifecycle in 54 main-sequence galaxies***,
   Monthly Notices of the Royal Astronomical Society, 10/2022, Kim, J., Chevance, M., Kruijssen, J.M.D., Leroy, A.K., Schruba, A., Barnes, A.T., Bigiel, F., Blanc, G.A., Cao, Y., Congiu, E., Dale, D.A., Faesi, C.M., Glover, S.C.O., Grasha, K., Groves, B., Hughes, A., Klessen, R.S., Kreckel, K., **McElroy, R.**, Pan, H.-A., Pety, J., Querejeta, M., Razza, A., Rosolowsky, E., Saito, T., Schinnerer, E., Sun, J., Tomičić, N., Usero, A., and Williams, T.G., **Citations - 16**
7. ***The PHANGS-MUSE survey. Probing the chemo-dynamical evolution of disc galaxies***,
   Astronomy and Astrophysics, 03/2022, Emsellem, E., Schinnerer, E., Santoro, F., Belfiore, F., Pessa, I., **McElroy, R.**, Blanc, G.A., Congiu, E., Groves, B., Ho, I.-T., Kreckel, K., Razza, A., Sanchez-Blazquez, P., Egorov, O., Faesi, C., Klessen, R.S., Leroy, A.K., Meidt, S., Querejeta, M., Rosolowsky, E., Scheuermann, F., Anand, G.S., Barnes, A.T., Bešlić, I., Bigiel, F., Boquien, M., Cao, Y., Chevance, M., Dale, D.A., Eibensteiner, C., Glover, S.C.O., Grasha, K., Henshaw, J.D., Hughes, A., Koch, E.W., Kruijssen, J.M.D., Lee, J., Liu, D., Pan, H.-A., Pety, J., Saito, T., Sandstrom, K.M., Schruba, A., Sun, J., Thilker, D.A., Usero, A., Watkins, E.J., and Williams, T.G., **Citations - 66**
8. ***The Close AGN Reference Survey (CARS). IFU survey data and the BH mass dependence of long-term AGN variability***,
   Astronomy and Astrophysics, 03/2022, Husemann, B., Singha, M., Scharwächter, J., **McElroy, R.**, Neumann, J., Smirnova-Pinchukova, I., Urrutia, T., Baum, S.A., Bennert, V.N., Combes, F., Croom, S.M., Davis, T.A., Fournier, Y., Galkin, A., Gaspari, M., Enke, H., Krumpe, M., O'Dea, C.P., Pérez-Torres, M., Rose, T., Tremblay, G.R., and Walcher, C.J., **Citations - 7**
9. ***The Gas-Star Formation Cycle in Nearby Star-forming Galaxies. II. Resolved Distributions of CO and Hα Emission for 49 PHANGS Galaxies***,
   The Astrophysical Journal, 03/2022, Pan, H.-A., Schinnerer, E., Hughes, A., Leroy, A., Groves, B., Barnes, A.T., Belfiore, F., Bigiel, F., Blanc, G.A., Cao, Y., Chevance, M., Congiu, E., Dale, D.A., Eibensteiner, C., Emsellem, E., Faesi, C.M., Glover, S.C.O., Grasha, K., Herrera, C.N., Ho, I.-T., Klessen, R.S., Kruijssen, J.M.D., Lang, P., Liu, D., **McElroy, R.**, Meidt, S.E., Murphy, E.J., Pety, J., Querejeta, M., Razza, A., Rosolowsky, E., Saito, T., Santoro, F., Schruba, A., Sun, J., Tomičić, N., Usero, A., Utomo, D., and Williams, T.G., **Citations - 12**
10. ***PHANGS-MUSE: The H II region luminosity function of local star-forming galaxies***,
    Astronomy and Astrophysics, 02/2022, Santoro, F., Kreckel, K., Belfiore, F., Groves, B., Congiu, E., Thilker, D.A., Blanc, G.A., Schinnerer, E., Ho, I.-T., Kruijssen, J.M.D., Meidt, S., Klessen, R.S., Schruba, A., Querejeta, M., Pessa, I., Chevance, M., Kim, J., Emsellem, E., **McElroy, R.**, Barnes, A.T., Bigiel, F., Boquien, M., Dale, D.A., Glover, S.C.O., Grasha, K., Lee, J., Leroy, A.K., Pan, H.-A., Rosolowsky, E., Saito, T., Sanchez-Blazquez, P., Watkins, E.J., and Williams, T.G., **Citations - 25**

11. ***Comparing the pre-SNe feedback and environmental pressures for 6000 H II regions across 19 nearby spiral galaxies***,
Monthly Notices of the Royal Astronomical Society, 12/2021, Barnes, A.T., Glover, S.C.O., Kreckel, K., Ostriker, E.C., Bigiel, F., Belfiore, F., Bešlić, I., Blanc, G.A., Chevance, M., Dale, D.A., Egorov, O., Eibensteiner, C., Emsellem, E., Grasha, K., Groves, B.A., Klessen, R.S., Kruijssen, J.M.D., Leroy, A.K., Longmore, S.N., Lopez, L., **McElroy, R.**, Meidt, S.E., Murphy, E.J., Rosolowsky, E., Saito, T., Santoro, F., Schinnerer, E., Schruba, A., Sun, J., Watkins, E.J., and Williams, T.G., **Citations - 21**
12. ***PHANGS-ALMA: Arcsecond CO(2-1) Imaging of Nearby Star-forming Galaxies***,
The Astrophysical Journal Supplement Series, 12/2021, Leroy, A.K., Schinnerer, E., Hughes, A., Rosolowsky, E., Pety, J., Schruba, A., Usero, A., Blanc, G.A., Chevance, M., Emsellem, E., Faesi, C.M., Herrera, C.N., Liu, D., Meidt, S.E., Querejeta, M., Saito, T., Sandstrom, K.M., Sun, J., Williams, T.G., Anand, G.S., Barnes, A.T., Behrens, E.A., Belfiore, F., Benincasa, S.M., Bešlić, I., Bigiel, F., Bolatto, A.D., den Brok, J.S., Cao, Y., Chandar, R., Chastenet, J., Chiang, I.-D., Congiu, E., Dale, D.A., Deger, S., Eibensteiner, C., Egorov, O.V., García-Rodríguez, A., Glover, S.C.O., Grasha, K., Henshaw, J.D., Ho, I.-T., Kepley, A.A., Kim, J., Klessen, R.S., Kreckel, K., Koch, E.W., Kruijssen, J.M.D., Larson, K.L., Lee, J.C., Lopez, L.A., Machado, J., Mayker, N., **McElroy, R.**, Murphy, E.J., Ostriker, E.C., Pan, H.-A., Pessa, I., Puschnig, J., Razza, A., Sánchez-Blázquez, P., Santoro, F., Sardone, A., Scheuermann, F., Sliwa, K., Sormani, M.C., Stuber, S.K., Thilker, D.A., Turner, J.A., Utomo, D., Watkins, E.J., and Whitmore, B., **Citations - 122**
13. ***The Blue Supergiant Progenitor of the Supernova Imposter AT 2019krl***,
The Astrophysical Journal, 08/2021, Andrews, J.E., Jencson, J.E., Van Dyk, S.D., Smith, N., Neustadt, J.M.M., Sand, D.J., Kreckel, K., Kochanek, C.S., Valenti, S., Strader, J., Bersten, M.C., Blanc, G.A., Bostroem, K.A., Brink, T.G., Emsellem, E., Filippenko, A.V., Folatelli, G., Kasliwal, M.M., Masci, F.J., **McElroy, R.**, Milisavljevic, D., Santoro, F., and Szalai, T., **Citations - 12**
14. ***The SAMI Galaxy Survey: the third and final data release***,
Monthly Notices of the Royal Astronomical Society, 07/2021, Croom, S.M., Owers, M.S., Scott, N., Poetrodjojo, H., Groves, B., van de Sande, J., Barone, T.M., Cortese, L., D'Eugenio, F., Bland-Hawthorn, J., Bryant, J., Oh, S., Brough, S., Agostino, J., Casura, S., Catinella, B., Colless, M., Cecil, G., Davies, R.L., Drinkwater, M.J., Driver, S.P., Ferreras, I., Foster, C., Fraser-McKelvie, A., Lawrence, J., Leslie, S.K., Liske, J., López-Sánchez, Á.R., Lorente, N.P.F., **McElroy, R.**, Medling, A.M., Obreschkow, D., Richards, S.N., Sharp, R., Sweet, S.M., Taranu, D.S., Taylor, E.N., Tescari, E., Thomas, A.D., Tocknell, J., and Vaughan, S.P., **Citations - 44**
15. ***PHANGS-ALMA Data Processing and Pipeline***,
The Astrophysical Journal Supplement Series, 07/2021, Leroy, A.K., Hughes, A., Liu, D., Pety, J., Rosolowsky, E., Saito, T., Schinnerer, E., Schruba, A., Usero, A., Faesi, C.M., Herrera, C.N., Chevance, M., Hygate, A.P.S., Kepley, A.A., Koch, E.W., Querejeta, M., Sliwa, K., Will, D., Wilson, C.D., Anand, G.S., Barnes, A., Belfiore, F., Bešlić, I., Bigiel, F., Blanc, G.A., Bolatto, A.D., Boquien, M., Cao, Y., Chandar, R., Chastenet, J., Chiang, I.-D., Congiu, E., Dale, D.A., Deger, S., den Brok, J.S., Eibensteiner, C., Emsellem, E., García-Rodríguez, A., Glover, S.C.O., Grasha, K., Groves, B., Henshaw, J.D., Jiménez Donaire, M.J., Kim, J., Klessen, R.S., Kreckel, K., Kruijssen, J.M.D., Larson, K.L., Lee, J.C., Mayker, N., **McElroy, R.**, Meidt, S.E., Mok, A., Pan, H.-A., Puschnig, J., Razza, A., Sánchez-Bl'azquez, P., Sandstrom, K.M., Santoro, F., Sardone, A., Scheuermann, F., Sun, J., Thilker, D.A., Turner, J.A., Ubeda, L., Utomo, D., Watkins, E.J., and Williams, T.G., **Citations - 55**
16. ***Erratum: "Mapping Metallicity Variations across Nearby Galaxy Disks" (2019, ApJ, 887, 80)***,
The Astrophysical Journal, 05/2021, Kreckel, K., Ho, I.-T., Blanc, G.A., Groves, B., Santoro, F., Schinnerer, E., Bigiel, F., Chevance, M., Congiu, E., Emsellem, E., Faesi, C., Glover, S.C.O., Grasha, K., Kruijssen, J.M.D., Lang, P., Leroy, A.K., Meidt, S.E., **McElroy, R.**, Pety, J., Rosolowsky, E., Saito, T., Sandstrom, K., Sanchez-Blazquez, P., and Schruba, A., **Citations - 0**
17. ***Measuring the mixing scale of the ISM within nearby spiral galaxies***,
Monthly Notices of the Royal Astronomical Society, 11/2020, Kreckel, K., Ho, I.-T., Blanc, G.A., Glover, S.C.O., Groves, B., Rosolowsky, E., Bigiel, F., Boquíen, M., Chevance, M., Dale, D.A., Deger, S., Emsellem, E., Grasha, K., Kim, J.J., Klessen, R.S., Kruijssen, J.M.D., Lee, J.C., Leroy, A.K., Liu, D., **McElroy, R.**, Meidt, S.E., Pessa, I., Sanchez-Blazquez, P., Sandstrom, K., Santoro, F., Scheuermann, F., Schinnerer, E., Schruba, A., Utomo, D., Watkins, E.J., and Williams, T.G., **Citations - 38**
18. ***Mapping Metallicity Variations across Nearby Galaxy Disks***,
The Astrophysical Journal, 12/2019, Kreckel, K., Ho, I.-T., Blanc, G.A., Groves, B., Santoro, F., Schinnerer, E., Bigiel, F., Chevance, M., Congiu, E., Emsellem, E., Faesi, C., Glover, S.C.O., Grasha, K., Kruijssen, J.M.D., Lang, P., Leroy, A.K., Meidt, S.E., **McElroy, R.**, Pety, J., Rosolowsky, E., Saito, T., Sandstrom, K., Sanchez-Blazquez, P., and Schruba, A., **Citations - 83**

19. ***Mapping Electron Temperature Variations across a Spiral Arm in NGC 1672***,
The Astrophysical Journal, 11/2019, Ho, I.-T., Kreckel, K., Meidt, S.E., Groves, B., Blanc, G.A., Bigiel, F., Dale, D.A., Emsellem, E., Glover, S.C.O., Grasha, K., Kewley, L.J., Kruijssen, J.M.D., Lang, P., **McElroy, R.**, Kudritzki, R.-P., Sanchez-Blazquez, P., Sandstrom, K., Santoro, F., Schinnerer, E., and Schruba, A., **Citations - 18**
20. ***The Physics at High Angular resolution in Nearby GalaxieS (PHANGS) Surveys***,
The Messenger, 09/2019, Schinnerer, E., Leroy, A., Blanc, G., Emsellem, E., Hughes, A., Rosolowsky, E., Schruba, A., Bigiel, F., Escala, A., Groves, B., Kreckel, K., Kruijssen, D., Lee, J., Meidt, S., Pety, J., Sanchez-Blazquez, P., Sandstrom, K., Usero, A., Barnes, A., Belfiore, F., Bešlić, I., Chandar, R., Chatzigiannakis, D., Chevance, M., Congiu, E., Dale, D., Faesi, C., Gallagher, M., Garcia-Rodriguez, A., Glover, S., Grasha, K., Henshaw, J., Herrera, C., Ho, I.-T., Hygate, A., Jimenez-Donaire, M., Kessler, S., Kim, J., Klessen, R., Koch, E., Lang, P., Larson, K., Le Reste, A., Liu, D., **McElroy, R.**, Nofech, J., Ostriker, E., Pessa Gutierrez, I., Puschnig, J., Querejeta, M., Razza, A., Saito, T., Santoro, F., Stuber, S., Sun, J., Thilker, D., Turner, J., Ubeda, L., Utreras, J., Utomo, D., van Dyk, S., Ward, J., and Whitmore, B., **Citations - 10**
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