

Pamela Klaassen

Instrument Scientist
UK Astronomy Technology Centre
Royal Observatory, Edinburgh
Blackford Hill, Edinburgh
EH9 3HJ
United Kingdom

Phone: +44 (0)131 6688 218
Email: pamela.klaassen@stfc.ac.uk

Citizenship: Canada, Netherlands

Current Position

2014- **Instrument Scientist** UK Astronomy Technology Centre
JWST/ MIRI: MIRI simulator (MIRISim) Scientific Lead
SKA: Product Owner (Team Lead) Observatory Science Operations Tools
AtLAST: Science Working Group Lead
Independent Science: Gas dynamics in high-mass star forming regions

Fellowships

2011-2014 **Allegro Post-Doctoral Fellow** Leiden Observatory
Independent Research (50%): Gas dynamics in high-mass star forming regions
ALMA User & Observatory Support (50%)

2008-2011 **ALMA Fellow** European Southern Observatory (ESO)
Independent Research (75%): Gas dynamics in high-mass star forming regions
ALMA Observatory Support (25%)

2005-2006 **SMA Pre-Doctoral Fellow** Harvard-Smithsonian CfA
3D Radiative Transfer Modelling of Proto-Stellar Outflows

Education

2004-2008 **Doctor of Philosophy, Astrophysics**, McMaster University
Thesis Topic: *Outflows from High Mass Protostellar Objects*
Supervisor: C. Wilson

2003-2004 **Master of Science, Astronomy**, University of Calgary
Thesis Topic: *Characterization of the Outflow in W28A2*
Supervisor: R. Plume

Principle Scientific Achievements

- The ionized and molecular gas dynamics in high-mass star-forming regions appear to be self consistent suggesting these two gas populations may interact (Keto & Klaassen 2008, Klaassen et al. 2011, Klaassen et al. 2018)
- Ionisation driven outflows predicted by theory (Peters, Klaassen et al. 2012), can be observational characterised as different from canonical outflows (Klaassen et al. 2013b).
- Shown the first evidence for a disk wind in a proto-stellar system using ALMA data of HD 163296 (Klaassen et al. 2013a) and TW Hydra (Klaassen et al. 2016).

Awards

- 2012 Lorentz Center Workshop (€13,700)
- 2012&2014 Leiden Observatory Travel Grant
- 2010 RadioNet travel funding - International time allocation at JCMT (€3,000)
- 2006-2007 McMaster Internal Prestige Award (\$10,000)
- 2004 McMaster Entrance Scholarship(\$3,000)
- 2003-2007 National Science and Engineering Research Council Student Travel Grant for travel to JCMT and VLA (\$5000-\$7000)

Post-Doctoral Fellow Supervisory Experience

- 2017- Olivia Jones, Rutherford International Fellow, UKATC
AGB stars and Supernovae with JWST
- 2018- Megan Reiter, Rutherford International Fellow, UKATC
Feedback from Massive stars

Student Supervisory Experience

- 2017 University of Edinburgh Senior (Undergraduate) Honours
(A. Clements, H. Noonan)
- 2014 LEAPS Summer Student Project Supervisor (A. Frost)
- Dec 2013 PhD Defence Opposition member (K-S. Wang)
- 2012 Senior Undergraduate Research Projects (with Michiel Hogerheijde)
↔ Cleaning, and modelling of ALMA science verification data

Conference and Meeting Organisation

- 2018- **Chair** High Resolution Spectroscopy in the era of ALMA, JWST and ELT (Sextens CfA, Jul 2019)
- 2017-2018 **Organiser** AtLAST telescope workshops (Jan 2018, Sept 2018)
- 2016- **Organiser** ESA JWST Users Workshops
- 2012-2013 **Co-Chair** Lorentz Center Workshop on High-Mass Star Formation
- 2011-2014 **Organiser** Leiden Star Formation Group Biweekly Meetings
- 2011 **Organiser** Allegro ALMA Cycle 0 PI Workshop
- 2011 **Organiser** ESO Fellow Days, Garching, Germany
- 2011 **Organiser** High-Mass Star Formation with ALMA workshop
- 2008-2009 **LOC Member** ESO-MPE Workshop (Garching, Germany)

Committee Membership

2018	Member UK ATC Diversity Panel
2017-	Chair Science Working Group, AtLAST telescope consortium
2016-2017	Member STFC Athena Swan committee
2013-2014	Member Leiden Observatory Revitalisation Committee
2009-2011	Member ESO Garching Scientific Visitor Programme Committee
2009	Member ESO Marie Curie COFUND Fellowship Selection Committee
2009	Assistant ESO Science and Technology Council (STC) Meeting
2008	Assistant ESO Observing Proposal Selection Committee (OPC)

Conference Proceedings & Technical Documents (Past 5 years)

- **Klaassen, P.** et al. *The Atacama Large Aperture Submillimeter Telescope (AtLAST)* (2019, arXiv e-prints, arXiv/1907.04756K)
- Groppi, C. et al. (including **Klaassen, P. D.**), *First Generation Heterodyne Instrumentation Concepts for the Atacama Large Aperture Submillimeter Telescope* (2019, arXiv e-prints, arXiv/1907.03479G)
- Sehgal, N. et al. (including **Klaassen, P. D.**), *CMB-HD: An Ultra-Deep, High-Resolution Millimeter-Wave Survey Over Half the Sky* (2019, arXiv e-prints, arXiv/190610134S)
- Bridger, A., et al (including **Klaassen, P. D.**), *SKA telescope Manager: a status update* (2018, SPIE, 10707 03B)
- Garcia Marin, M, et al. (including **Klaassen, P. D.**), *Observing recommendations for JWST MIRI users* (2018, SPIE, 10704 11G)
- Klaassen, P. D., & Geach, J. *Galactic Science case for the AtLAST telescope*
- O'Brien, A., Beard, S., Geers, V., & Klaassen, P. *MAISIE: a multipurpose astronomical instrument simulator environment* (2016, SPIE, 9913, 991312O)
- Bridger, A., Williams, S. J., Nicol, M., et al. (including **Klaassen, P.D.**) *Observation management challenges of the Square Kilometer Array* (2016, SPIE, 9913, 99130ZB)
- Labiano, A., Azzollini, R., Bailey, J., et al. (including **Klaassen, P.D.**) *The MIRI Medium Resolution Spectrometer calibration pipeline* (2016, SPIE, 9910, 99102WL)
- Thompson, M.A, et al. (including **Klaassen, P.D.**), *The ionised, radical and molecular Milky Way: spectroscopic surveys with the SKA* Advancing Science with the SKA. (2014, Proceedings of Science, astro-ph/1412.5554)
- Tilanus, R.P.J, et al. (including **Klaassen, P.D.**), *Future mmVLBI Research with ALMA: A European vision* astro-ph/1406.4650