

JAMES MICHAEL DE BUIZER

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STRATOSPHERIC OBSERVATORY FOR INFRARED ASTRONOMY • NASA AMES RESEARCH
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CURRENT POSITION

SOFIA Science Operations Manager & USRA Senior Scientist

MAIN RESEARCH AREAS

- Massive star formation: high mass protostellar objects to ultracompact HII regions
- IR and mm studies of jets and outflows from young stellar objects
- Maser emission in star forming regions (methanol, hydroxyl, and water masers)
- Circumstellar accretion, protoplanetary, and debris disks
- Active galactic nuclei and nuclear starbursts
- The supernova 1987A remnant
- Infrared instrumentation

EDUCATION

August 2000	University of Florida <i>Doctor of Philosophy, Astronomy</i> Dissertation: “A Mid-Infrared Imaging Survey of Star Forming Regions Containing Methanol and Water Maser Emission”	Gainesville, FL Advisor: Robert K. Piña
August 1997	University of Florida <i>Master of Science, Astronomy</i>	Gainesville, FL
May 1995	University of Florida <i>Bachelor of Science, Magna Cum Laude, Astronomy</i> Senior Thesis: “Short Term Periodicities in the Decametric Radiation of Jupiter”	Gainesville, FL Advisor: Thomas Carr

POSITIONS HELD AND RESEARCH ACTIVITIES

2015-present	Stratospheric Observatory for Infrared Astronomy <i>SOFIA Science Operations Manager & USRA Senior Scientist</i>	Moffett Field, CA
2008-2015	Stratospheric Observatory for Infrared Astronomy <i>FORCAST Instrument Scientist</i>	Moffett Field, CA
2003-2007	Gemini Observatory <i>Gemini Observatory Science Fellow and T-ReCS Instrument Scientist</i>	La Serena, Chile

2000-2004	Cerro Tololo Inter-American Observatory <i>CTIO Postdoctoral Fellow</i>	La Serena, Chile
1997-2000	University of Florida <i>Graduate Student and FSGC Graduate Fellow</i>	Gainesville, FL
1993-1996	University of Florida <i>Florida Undergraduate Scholar</i>	Gainesville, FL

INSTRUMENTATION EXPERIENCE

- Former SOFIA instrument scientist in charge of characterization, commissioning, and science usage of FORCAST
- Former T-ReCS Instrument Scientist at Gemini South in charge of maintenance and operation of the instrument
- Acceptance testing, commissioning, system verification, and early science usage of T-ReCS on the Gemini South 8-m
- Assisted in the commissioning and provided three years of technical support for OSCIR (University of Florida Infrared Astrophysics Group mid-infrared camera/spectrometer) while it was a facility instrument at the IRTF 3-m, CTIO 4-m, and Keck 10-m telescopes
- Laboratory experience includes characterization and implementation of filters in mid-infrared cryostats, as well as general maintenance, upgrading, and testing of mid-infrared instrumentation and software

OBSERVING EXPERIENCE

Instruments I have spent over 100 hours using:

- Stratospheric Observatory for Infrared Astronomy with mid-infrared instrument FORCAST
- Gemini North and South 8-meter telescopes with mid-infrared instruments T-ReCS and OSCIR, near-infrared instruments GNIRS and NIRI, adaptive optics instrument Altair, and optical instrument GMOS
- W.M. Keck II 10-meter telescope with mid-infrared instrument OSCIR
- Australian Telescope Compact Array of six 22-meter antennas and their 3-millimeter wavelength interferometric system
- Anglo-Australian 4-meter Telescope and IRIS2 (facility near infrared imager/spectrograph)
- Cerro-Tololo Inter-American Observatory 4-meter telescope with OSCIR and OSIRIS (Ohio State near InfraRed Imager/Spectrometer)
- NASA's InfraRed Telescope Facility 3-meter telescope with OSCIR, NSFCam (facility near infrared imager), and MIRLIN (visiting mid-infrared imager)
- University of Florida Radio Observatory (650- dipole decametric-wavelength array)
- University of Florida 0.8-meter telescope with the facility optical CCD camera

GRANTS (OVER \$5000), AWARDS, AND HONORS

2017	SOFIA Cycle 5 Research Program \$167,000 - <i>Revealing the Embedded Structures and Sources within Giant HII Regions: Wrapping up the Survey</i> (PI)
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- 2015 SOFIA Cycle 3 Research Program
\$78,000 - *Revealing the Embedded Structures and Sources within Giant HII Regions* (PI)
- 2014 SOFIA Cycle 2 Research Program
\$26,000 - *Revealing the Embedded Structures and Sources within Giant HII Regions* (PI)
- 2013 SOFIA Cycle 1 Research Program
\$29,200 - *Revealing the Embedded Structures and Sources within Giant HII Regions* (PI)
- 2011 NASA Group Achievement Award for SOFIA Initial Science Flight Team
- 2010 NASA Group Achievement Award for SOFIA First Light Flight Team
- 2007 Spitzer Space Telescope Cycle 4 Program
\$85,000 – *The Continuing IR Evolution of SN1987A* (CoI with Eli Dwek)
- 2006 Spitzer Space Telescope Cycle 3 Program
\$79,000 – *The Infrared Evolution of SN1987A* (CoI with Eli Dwek)
- 2000 - 2004 Cerro-Tololo Inter-American Observatory Postdoctoral Fellowship
- 1998 - 2000 Florida Space Grant Consortium Graduate Fellowship Program
\$36,000 – *Infrared Study of Young Stellar Objects with Methanol Maser Emission: A Search for Circumstellar Disks* (PI)
- 1995 National Collegiate Natural Sciences Award
- 1994 NASA/Florida Space Grant Undergraduate Fellowship Program
\$5000 – *Search for Effects of Comet S-L 9 Fragment Impacts on the Decametric Emission from Jupiter* (PI)
- 1990 - 1994 Florida Undergraduate Scholar

PUBLICATIONS

REFEREED JOURNAL ARTICLES

- 1 Su, K.Y.L., **De Buizer, J.M.**, Rieke, G.H., Krivov, A.V., Lohne, T., Marengo, M., Stapelfeldt, K.R., Ballering, N.P., & Vacca, W.D. 2017, 'The Inner 25 AU Debris Distribution in the Epsilon Eri System', *Astrophysical Journal*, submitted
- 2 **De Buizer, J.M.**, Liu, M., Tan, J., Zhang, Y., Beltran, M., Shuping, R., Staff, J., Tanaka, K., & Whitney, B. 2017, 'The SOFIA Massive (SOMA) Star Formation Survey: I. Overview and First Results', *Astrophysical Journal*, submitted
- 3 Temi, P., **De Buizer, J.M.**, et al. 2014, 'The SOFIA Observatory at the Start of Routine Science Operations : Mission Capabilities and Performance', *Astrophysical Journal Supplement*, 212, pg. 24
- 4 Sanna, A., Cesaroni, R., Moscadelli, L., Zhang, Q., Menten, K. M., Molinari, S., Caratti o Garatti, A. & **De Buizer, J.M.** 2014, 'A Sub-arcsec Study of the Hot Molecular Core in G023.01-00.41', *Astronomy & Astrophysics*, 565, pg. 34
- 5 Werner, M. W., Sahai, R., Davis, J., Livingston, J., Lykou, F., **De Buizer, J. M.**, Morris, M. R., Keller, L., Adams, J., Gull, G., Henderson, C., Herter, T., & Schoenwald, J. 2013, 'Mid-Infrared Imaging of the Bipolar Planetary Nebula M2-9 from SOFIA', *Astrophysical Journal*, 780, pg. 156
- 6 Herter, T.L., Vacca, W., Adams, Keller, L.D., J.D., Schoenwald, J., Hirsch, L., Wang, J., **De Buizer, J.M.**, Helton, L.A., & Llorens, M.C. 2013, 'Data Reduction and Early Science Calibration for FORCAST, A Mid-Infrared Camera for SOFIA', *PASP*, Volume 125, Issue 933, pg.1393
- 7 Andersson, B-G., Piirola, V., **De Buizer, J.M.**, Clemens, D.P., Uomoto, A., Charcos-Llorens, M., Geballe, T.G., Lazarian, A., Hoang, T., & Vornanen, T. 2013, 'H₂ Formation Driven Dust Grain Alignment in IC 63', *Astrophysical Journal*, 775, pg. 84
- 8 Zhang, Y., Tan, J.C., **De Buizer, J.M.**, Sandell, G., Beltran, M.T., Churchwell, E., McKee, C.F., Shuping, R., Staff, J.E., Telesco, C.M., & Whitney, B., 2013, 'A Massive Protostar Forming by Ordered Collapse of a Dense Massive Core', *Astrophysical Journal*, 767, pg. 58
- 9 **De Buizer, J.M.**, Bartkiewicz, A., & Szymczak, M. 2012, 'Testing the Hypothesis that Methanol Maser Rings Trace Circumstellar Disks: High Resolution Near-IR and Mid-IR Imaging', *Astrophysical Journal*, 754, pg. 149
- 10 Hirsch, L., Adams, J.D., Herter, T.L., Megeath, S.T., Hora, J.L., **De Buizer, J.M.**, Gull, G.E., Henderson, C.H., Keller, L.D., Schoenwald, J., & Vacca, W. 2012, 'SOFIA/FORCAST and Spitzer/IRAC Imaging of the Ultra Compact HII Region W3(OH) and Associated Protostars in W3', *Astrophysical Journal*, 757, pg. 113
- 11 **De Buizer, J.M.**, Morris, M.R., Becklin, E.E., Zinnecker, Z., Herter, T.L., Adams, J.D.,

- Shuping, R.Y., & Vacca, W.D. 2012, 'First Science Observations with SOFIA/FORCAST: 6 to 37 micron Imaging of Orion BN/KL', *Astrophysical Journal Letters*, 749, pg. 23
- 12 Young, E.T., Becklin, E.E., Marcum, P.M., Roellig, T.L., **De Buizer, J.M.** et al. 2012, 'Early Science with SOFIA, the Stratospheric Observatory for Infrared Astronomy', *Astrophysical Journal Letters*, 749, pg. 17
- 13 Herter, T.L., Adams, J.D., **De Buizer, J.M.**, Gull, G.E., Schoenwald, J., Henderson, C.P., Keller, L.D., Nikola, T., Stacey, G., & Vacca, W. 2012, 'First Science Observations with SOFIA/FORCAST: The FORCAST Mid-Infrared Camera', *Astrophysical Journal Letters*, 749, pg. 18
- 14 Shuping, R.Y., Morris, M.R., Herter, T.L., Adams, J.D., Becklin, E.E., **De Buizer, J.M.**, Vacca, W.D., Zinnecker, H., & Megeath, T.S. 2012, 'First Science Results From SOFIA/FORCAST: Observations of the Central Orion Nebula', *Astrophysical Journal Letters*, 749, pg. 22
- 15 Salgado, F., Berne, O., Adams, J.D., Herter, T.L., Gull, G.E., Schoenwald, J., Keller, L.D., **De Buizer, J.M.**, Vacca, W., Becklin, E.E., Zinnecker, H., Shuping, R.Y., & Tielens, A.G.G.M., 2012, 'First Science Observations with SOFIA/FORCAST: The Mid-Infrared View of the Compact III Region W3A', *Astrophysical Journal Letters*, 749, pg. 21
- 16 Harvey, P.M., Adams, J.D., Herter, T.L., Gull, G.E., Schoenwald, J., Keller, L.D., **De Buizer, J.M.**, Vacca, W., Reach, W. & Becklin, E.E. 2012, 'First Science Results From SOFIA/FORCAST: Super-Resolution Imaging of the S140 Cluster at 37 microns', *Astrophysical Journal Letters*, 749, pg. 20
- 17 Adams, J.D., Herter, T.L., Osorio, M., Macias, E., Megeath, S.T., Fischer, W.J., Ali, B., Becklin, E.E., Calvet, N., D'Alessio, P., **De Buizer, J.M.**, Gull, G.E., Henderson, C.P., Keller, L.D., Morris, M., Nikola, T., Remming, I.S., Schoenwald, J., Shuping, R.Y., Stacey, G., Stanke, T., Stutz, A., Tielens, A., & Vacca, W. 2012, 'First Science Observations with SOFIA/FORCAST: Properties of Protostars and Circumstellar Disks in OMC-2', *Astrophysical Journal Letters*, 749, pg. 24
- 18 Nikola, T., Herter, T.L., Vacca, W.D., Adams, J.D., **De Buizer, J.M.**, Gull, G.E., Henderson, C.P., Keller, L.D., Morris, M., Schoenwald, J., Shuping, R.Y., Stacey, G., & Tielens, A. 2012, 'First Science Observations with SOFIA/FORCAST: Mid-IR Observations of M82', *Astrophysical Journal Letters*, 749, pg. 19
- 19 Gehrz, R. D., Becklin, E. E., **De Buizer, J.M.**, Herter, T., Keller, L. D., Krabbe, A., Marcum, P. M., Roellig, T. L., Sandell, G. H. L., Temi, P., Vacca, W. D., Young, E. T., & Zinnecker, H. 2011, 'Status of the Stratospheric Observatory for Infrared Astronomy', *Advances in Space Research*, 48, pg. 1004
- 20 Dwek, E., Arendt, R.G., Bouchet, P. Burrows, D.N., Challis, P., Danziger, I.J., **De Buizer, J.M.**, Gehrz, J.D., Park, S., Polomski, E.F., Slavin, J.D., & Woodward, C. 2010, 'Five Years of Mid-Infrared Evolution of the Remnant of SN 1987A: Evidence for Grain Destruction and Insights Into the Ring Morphology', *Astrophysical Journal*, 722, pg. 425
- 21 **De Buizer, J.M.** & Vacca, W.D. 2010, 'Direct Spectroscopic Identification of the Origin of

- 'Green Fuzzy' Emission in Star Forming Regions', *Astronomical Journal*, 140, pg. 196
- 22 Fletcher, L.N., Orton, G.S., Mousis, O., Yanamandra-Fisher, P., Parrish, D., Irwin, P.G.J., Fisher, B.M., Vanzi, L., Fujiyoshi, T., Fuse, T., Edkins, E., Hayward, T., & **De Buizer, J.M.** 2010, 'Thermal Structure and Composition of Jupiter's Great Red Spot from High-Resolution Thermal Imaging', *Icarus*, 208, pg. 306
- 23 **De Buizer, J.M.**, Redman, R., Longmore, S.N., Caswell, J., & Feldman, P. 2009, 'SiO Outflow Signatures Toward Massive Young Stellar Objects with Linearly Distributed Methanol Masers', *Astronomy & Astrophysics*, 493, pg. 127
- 24 Radomski, J.T., Packham, C., Orduna, M., Perlman, E., Matthews, H., Leeuw, L.L., **De Buizer, J.M.**, & Telesco, C.M. 2008, 'Gemini Imaging of Mid-IR Emission from the Nuclear Region of Centaurus A', *Astrophysical Journal*, 681, pg. 141
- 25 Persi, P., Gomez, M., Tapia, M., Roth, M., **De Buizer, J.M.**, & Marenzi, A.R. 2008, 'Star Formation in the Southern Dark Cloud DC296.2-3.6', *Astronomical Journal*, 135, pg. 2279
- 26 Campbell, M.F., Sridharan, T.K., Beuther, H., Lacy, J.H., Hora, J.L., Zhu, Q., Kassis, M., Saito, M., **De Buizer, J.M.**, Fung, S.H., & Johnson, L.C. 2008, 'Mid-Infrared Photometry and Spectra of Three High Mass Protostellar Candidates at IRAS 18151-1208 and IRAS 20343+4129', *Astrophysical Journal*, 673, pg. 954
- 27 Dwek, E., Arendt, R.G., Bouchet, P., Burrows, D.N., Challis, P., Danziger, I.J., **De Buizer, J.M.**, Gehrz, J.D., Kirshner, R.P., McCray, R., Park, S., Polomski, E.F., & Woodward, C. 2008, 'Infrared and X-Ray Evidence for Circumstellar Grain Destruction by the Blast Wave of Supernova 1987A', *Astrophysical Journal*, 676, pg. 1029
- 28 **De Buizer, J.M.** 2007, 'The Complex Mid-Infrared Structure at the Heart of IRAS 20126+4104', *Astrophysical Journal Letters*, Vol. 654, pg. 174
- 29 Moerchen, M. M., Telesco, C.M., **De Buizer, J.M.**, Radomski, J. T., & Packham, C. 2007, 'First Images of the Warm Dust surrounding HD 32297', *Astrophysical Journal Letters*, 655, pg. 109
- 30 Ireland, M.J., Monnier, J.D., Tuthill, P.G., Cohen, R.W., **De Buizer, J.M.**, Volk, K., Telesco, C.M., Packham, C., Ciardi, D., Hayward, T. & Lloyd, J.P. 2007, 'Born-Again Protoplanetary Disk Around Mira B', *Astrophysical Journal*, 662, pg. 651
- 31 Radomski, J.T., Packham, C., Orduna, M., Perlman, E., Matthews, H., Leeuw, L.L., **De Buizer, J.M.**, & Telesco, C.M. 2007, 'Gemini Imaging of Mid-IR Emission from the Nuclear Region of Centaurus A', *Astrophysical Journal*, submitted
- 32 **De Buizer, J.M.** 2006, 'The Remarkable Mid-Infrared Jet of Massive Young Stellar Object G35.20-0.74', *Astrophysical Journal Letters*, Vol. 642, pg. 57
- 33 Bouchet, P., Dwek, E., Danziger, J.I., Arendt, R.G., **De Buizer, J.M.**, Park, S., Suntzeff, N.B., Kirshner, R.P., & Challis, P. 2006, 'SN1987A After 18 Years: Mid-Infrared Gemini and Spitzer Observations of the Remnant', *Astrophysical Journal*, Vol. 650, pg. 212

- 34 **De Buizer, J.M.**, Osorio, M., & Calvet, N. 2005, 'Observations and Modeling of the 2-25 μ m Emission From High Mass Protostellar Object Candidates', *Astrophysical Journal*, Vol. 635, pg. 452
- 35 **De Buizer, J.M.** & Minier, V. 2005, 'Investigating the Nature of the Dust Emission Around Massive Protostar NGC 7538 IRS 1: Circumstellar Disk and Outflow', *Astrophysical Journal Letters*, Vol. 628, pg. L151
- 36 **De Buizer, J.M.**, Radomski, J.T., Telesco, C.M., & Pina, R.K. 2005, 'Observations of Massive Star Forming Regions with Water Masers: Mid-Infrared Imaging', *Astrophysical Journal Supplement Series*, Vol. 156, pg. 179
- 37 Ciardi, D.R., Gomez Martin, C., Telesco, C.M., Packham, C., Radomski, J.T., **De Buizer, J.M.**, & Phillips, C.J. 2005, 'Crystalline Silicate Emission in the Flat-Spectrum Binary System Serpens-SVS20', *Astrophysical Journal*, Vol. 629, pg. 897
- 38 Meech, K.J., **De Buizer, J.M.**, et al. 2005, 'Deep Impact: Observations from a Worldwide Earth-Based Campaign', *Science* 310, pg. 265
- 39 Telesco, C.M., Fisher, R.S., Wyatt, M.C., Dermott, S.F., Kehoe, T., Novotny, S., Marinas, N., Radomski, J.T., Packham, C., **De Buizer, J.M.**, & Hayward, T.L. 2005, 'Mid-IR Images of Beta Pictoris and the Possible Role of Planetesimal Collisions in the Central Disk', *Nature*, Vol. 433, pg. 133
- 40 Gorjian, V., Werner, M. W., Mould, J.R., Gordon, K. D., Muzzerole, J., Morrison, J., Surace, J. M., Rebull, L.M., Hurt, R. L., Smith, R. C., Points, S.D., Aguilera, C., **De Buizer, J.M.**, Packham, C. 2004, 'Infrared Imaging of the LMC Star Forming Region Henize 206', *Astrophysical Journal Supplement Series (Spitzer Special Edition)*, Vol. 154, pg. 275
- 41 Bouchet, P., **De Buizer, J.M.**, Suntzeff, N.B., Danziger, J.I., Hayward, T.L., Telesco, C.M., & Packham, C. 2004, 'High-Resolution Imaging of SN 1987A at 10 \square m', *Astrophysical Journal Letters*, Vol. 611, pg. 275
- 42 **De Buizer, J.M.**, Radomski, J.T., Telesco, C.M., & Pina, R.K. 2003, 'A Search for Mid-Infrared Emission from Hot Molecular Core Candidates', *Astrophysical Journal*, Vol. 589, pg. 1127
- 43 **De Buizer, J.M.** 2003, 'Testing the Circumstellar Disk Hypothesis: A Search for H₂ Outflow Signatures from Young Massive YSOs with Linearly Distributed Methanol Masers', *Monthly Notices of the Royal Astronomical Society*, Vol. 341, pg. 277
- 44 Radomski, J.T., Pina, R.K., Packham, C., **De Buizer, J.M.**, Fisher, R.S., & Telesco, C.M. 2002, 'Resolved Mid-IR Emission in the Narrow Line Region of NGC 4151', *Astrophysical Journal*, Vol. 587, pg. 117
- 45 **De Buizer, J.M.**, Radomski, J.T., Pina, R.K., & Telesco, C.M. 2002, 'Mid-Infrared Imaging of NGC 6334 I', *Astrophysical Journal*, Vol. 580, pg. 305
- 46 **De Buizer, J.M.**, Watson, A.M., Radomski, J.T., Pina, R.K., & Telesco, C.M. 2002, 'Mid-Infrared Detection of a Hot Molecular Core in G29.96-0.02', *Astrophysical Journal Letters*, Vol. 564, pg. L101

- 47 **De Buizer, J.M.**, Walsh, A.J., Pina, R.K., Phillips, C.J., & Telesco, C.M., 2002, ‘High-Resolution Mid-Infrared Imaging of G339.88-1.26’, *Astrophysical Journal*, Vol. 564, pg. 327
- 48 **De Buizer, J.M.**, Pina, R.K., & Telesco, C.M., 2000, ‘Mid-Infrared Imaging of Massive Star Forming Sites Containing Methanol Masers’, *Astrophysical Journal Supplement Series*, Vol. 130, pg. 437-461
- 49 Carr, T.D., Reyes, F., Phillips, J.A., May, J., Wang, L., Aparici, J., Alvarez, H., Olmos, F., Garcia, L., **De Buizer, J.M.**, Greenman, W.B., Clark, Y., Levy, J., Padin, S., & Higgins, C.A. 1995, ‘Results of Decametric Monitoring of the Comet Collision with Jupiter’, *Geophysical Research Letters*, Vol. 22, no.13, pg. 1785
- 50 Carr, T.D., Reyes, F., Garcia, L., Greenman, W.B., Levy, J., Higgins, C.A., **De Buizer, J.M.**, May, J., Aparici, J., Alvarez, H., Olmos, F., Phillips, J.A., Clark, T., & Padin, S. 1994, ‘Search for Effects of Comet S-L 9 Fragment Impacts on Low Frequency Emission from Jupiter’, *Earth, Moon, and Planets*, Vol. 66, pg. 31

CONFERENCE PROCEEDINGS

- Civeit, T., Andersson, B-G, Moore, E., & **De Buizer, J.M.** 2017, ‘SOFIA Observatory Automated Scheduling After 5 Years of Operations’, *IEEE Aerospace Conference*, in press
- Smith, E.C., Miles, J.W., Andersson, B.G., Becklin, E.E., **De Buizer, J.M.**, et al. 2014, ‘SOFIA Science Instruments: Commissioning, Upgrades, and Future Opportunities’, *Ground-based and Airborne Instrumentation for Astronomy V*, SPIE, Paper 9147-5
- Wooden, D. H., **De Buizer, J. M.**, Kelley, M. S., Woodward, C. E., Harker, D. E., Reach, W. T., Sitko, M. L., Russell, R. W., Gehrz, R. D., de Pater, I., & Kolokolova, L. 2014, ‘SOFIA FORCAST Far-IR Photometry of Comet ISON Constraints on the Coma Grain Size Distribution’, *Lunar Planetary Science Conference XLV*, pg. 2906
- Miles, J.W., Andersson, B.G., Becklin, E.E., **De Buizer, J.M.**, et al. 2013, ‘The Capabilities, Performance, and Status of the SOFIA First-Generation Instruments’, *Infrared Remote Sensing and Instrumentation XXI*, SPIE, Paper 8867-20
- De Buizer, J.M.**, Bartkiewicz, A., & Szymczak, M. 2012, ‘The Infrared Environments of Methanol Maser Rings at High Spatial Resolution’, in *Comet Masers from OH to H₂O*, eds. R. Booth, L. Humphries, & W. Vlemmings, (IAU Symposium No. 287), 8, pg. 151
- Adams, J.D., Herter, T.L., Gull, G.E., Schoenwald, J., Henderson, C.P., Keller, L.D., **De Buizer, J.M.**, Stacey, G.J., Nikola, T., Vacca, W., Hirsch, L., Wang, J., & Helton, L.A. 2012, ‘The FORCAST Mid-Infrared Facility Instrument and In-Flight Performance on SOFIA’, *SPIE Proceedings*, pg. 3
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- 2011, *Studies of Methanol Maser Rings*, in "VLBI and the New Generation of Radio Arrays", Proceedings of Science, in press
- Adams, J.D., Herter, T.L., Gull, G.E., Schoenwald, J., Henderson, C.P., Keller, L.D., **De Buizer, J.M.**, Stacey, G.J. & Nikola, T. 2010, *FORCAST: A First Light Facility Instrument for SOFLA*, SPIE Proceedings, 7735, p. 7735
- De Buizer, J.M.** 2007, 'The Infrared Environments of Masers Associated with Star Formation', in *Astrophysical Masers and Their Environments*, eds. J. Chapman & W. Baan, (IAU Symposium No. 242), pg. 102
- Danziger, I. J., Bouchet, P. , **De Buizer, J.M.**, Dwek, E. & Arendt, R. 2007, 'IR Imaging of SN1987A', in *SN1987A: 20 Years After - Supernovae and Gamma-Ray Bursters*, eds. S. Immler, (AIP Conference Proceedings Vol. 937), pg. 66
- Danziger, I. J., Bouchet, P. , Dwek, E., Arendt, R., **De Buizer, J.M.**, Park, S., Suntzeff, N.B., Kirshner, R.P., & Challis, P. 2007, 'SN1987A at 18 Years: Ejecta-Ring Interaction', in *The Multi-Colored Landscape of Compact Objects and Their Explosive Origins*, eds. L.A. Antonelli et al., (AIP Conf. Proc., Vol. 924), pg. 383
- Bouchet, P., Dwek, E., Danziger, I. J., Arendt, R., & **De Buizer, J.M.** 2007, 'Supernova Remnant SNR 1987A in the Mid-Infrared at 18 Years', in *Visions for Infrared Astronomy*, eds. V. Coudé du Foresto, D. Rouan & G. Rousset, (Lavoisier Instrumentation, Mesure, & Métrologie, Vol. 6), pg. 139
- De Buizer, J.M.** 2006, 'New Insights Into the Nature of Mid-Infrared Emission Associated with Massive Star Formation: Disks and Outflow', in *Triggered Star Formation in a Turbulent ISM*, eds. B.G. Elmegreen & J. Palous, (IAU Symposium No. 237), pg. 407
- Radomski, J. T. , Packham, C., Levenson, N. A., Perlman, E., Leeuw, L. L., Matthews, H., Mason, R., **De Buizer, J. M.**, Telesco, C. M., & Orduna, M. 2006, 'Mid-Infrared Emission from the Nucleus of Centaurus A', in *First Light Science with the GTC*, eds. R. Guzman, C. Packham & J.M. Rodriguez Espinosa (RMAA Conf. Ser.), Vol. 29, pg. 161
- De Buizer, J.M.** 2006, 'New Results from Observations of Massive Star Formation in the Mid-Infrared with Large Aperture Telescopes', in *First Light Science with the GTC*, eds. R. Guzman, C. Packham & J.M. Rodriguez Espinosa (RMAA Conf. Ser.), Vol. 29, pg. 146
- De Buizer, J.M.** 2005, 'Gemini T-ReCS and Michelle Observations of Massive Young Stellar Sources with Mid-Infrared Outflows and Jets', in *Protostars and Planets V*, pg. 8406
- Pestalozzi, M. R., Elitzur, M., Minier, V., Conway, J., Booth, R., **De Buizer, J.M.**, Weigelt, G. 2005, 'Modelling a Circumstellar Disc Traced by Methanol Masers', in *Protostars and Planets V*, pg. 8129
- Minier, V., **De Buizer, J.M.**, et al. 2005, 'The Earliest Stages of High Mass Star Formation – Methanol Maser Insights', in *Protostars and Planets V*, pg. 8055
- De Buizer, J.M.**, Radomski, J.T., Telesco, C.M., & Pina, R.K. 2005, 'Masers and the Star Formation Process: New Insights Through Infrared Observations', in *Massive Star*

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