

Angela Speck – Publications

Many of the following are available to download via my personal or group website at

<http://www.missouri.edu/~speckan> and <http://stardust.astro.missouri.edu>

* denotes undergraduate or graduate student or postdoctoral researcher advised by Angela Speck.

Manuscripts in review or in preparation:

- A. Corman, Adrian B., Wakeman, Kristina, Speck, Angela K., Thompson, Grant, “Silicon Carbide Absorption in Extreme Carbon Stars: Radiative Transfer Modeling”, 2007 in preparation [started in August 2006]
- B. Adrienne Dove* & Angela K. Speck, “CLOUDY modeling of weird Far-IR emission in the central zone of the Helix Nebula”, 2007, in preparation [started in March/April 2006].
- C. DePew, Kyle*, Speck, Angela K., Dijkstra, Catharinus & Anne M. Hofmeister, “Astromineralogy of the 13 Micron Feature in the Spectra of Oxygen-Rich AGB Stars. II. Silica”, 2007, in preparation [started in May 2006].
- D. Pitman K.M.*, Hofmeister A.M., Speck A.K., Dijkstra C.R., “Room temperature forsterite and fayalite absorbances”, 2007, MNRAS in preparation [started in March/April 2006].
- E. Pitman K.M.*, Hofmeister A.M., Speck A.K., “Laboratory measurements of silicon carbide I. Optical constants and reflectance spectra”, 2007, A&A in preparation [started in July 2006].
- F. Matsuura, M., Speck, A.K., Smith, M.D., Zijlstra, A.A., Lowe, K.T.E., Viti, S., Redman, M., Wareing, C.J., Lagarde, E., “VLT / Infrared Integral Field Spectrometer Observations of Molecular Hydrogen Lines in the Globules in the Planetary Nebula NGC 7293 (the Helix Nebula)”, 2007, *Monthly Notices of the Royal Astronomical Society*, in review.
- G. Angela Speck, Karen Wilson*, Josh Tartar*, Margaret Meixner, D. C. Lis, Maia Nenkova, & Moshe Elitzur “An Extremely Extended Dust Shell around AFGL 618: Submillimeter Imaging and Radiative Transfer Modeling”, 2007, *Astrophysical Journal*, in post-review revision.

Refereed Publications:

1. Grant D. Thompson*, Adrian B. Corman*, Angela K. Speck, & Catharinus Dijkstra*, “Challenging the Carbon Star Dust Condensation Sequences: Anarchist C-Stars”, 2006, *Astrophysical Journal*, 652, 1654-1673.
2. Dijkstra, C.* & Speck, A.K., “Shaping Bipolar Planetary Nebulae: How Mass Loss Leads to Waistline Development”, 2006, *Astrophysical Journal*, 651, 288-293.
3. Angela K. Speck, Jan Cami, Ciska Markwick-Kemper, Jarron Leisenring, Ryszard Szczerba, Catharinus Dijkstra*, Schuyler Van Dyk, & Margaret Meixner, “The Unusual Spitzer Spectrum of the Carbon Star IRAS 04496-6958: A Different Condensation Sequence in the LMC?”, 2006, *Astrophysical Journal*, 650, 892-900.
4. C. Wareing, A. Zijlstra, T. Ueta, A. K. Speck, R. E. Stencel, M. Elitzur, R. Gertz, F. Herwig, H. Izumiura, W. Latter, M. Matsuura, M. Meixner, M. Steffen, & R. Szczerba “Detached shells as tracers of AGB-ISM bow shocks” 2006, *Monthly Notices of the Royal Astronomical Society*, 372, L63-L67.
5. K. M. Pitman*, A. K. Speck & A. M. Hofmeister, “Challenging the Identification of Nitride Dust in Extreme Carbon Star Spectra”, 2006, *Monthly Notices of the Royal Astronomical Society*, 371, 1744-1754.
6. T. Ueta, A. K. Speck, R. E. Stencel, M. Elitzur, R. Gertz, F. Herwig, H. Izumiura, W. Latter, M. Matsuura, M. Meixner, M. Steffen, R. Szczerba, & A. Zijlstra, “Detection of a Bow-Shock-Like Far-IR Nebula Associated with R Hy: the First MIRIAD Results”, 2006, *Astrophysical Journal Letters*, 648, L39-L42.
7. Ben E. K. Sugerman, Barbara Ercolano, M. J. Barlow, A. G. G. M. Tielens, Geoffrey C. Clayton, Albert A. Zijlstra, Margaret Meixner, Angela Speck, Tim M. Gledhill, Nino Panagia, Martin Cohen, Karl D. Gordon, Martin Meyer, Joanna Fabbri, Janet. E. Bowey, Douglas L. Welch, Michael W. Regan & Robert C. Kennicutt, Jr. “Massive-Star Supernovae as Major Dust Factories”, 2006, *Science*, 313, 196.

8. DePew, Kyle*, Speck, Angela, Dijkstra, Catharinus, "Astromineralogy of the 13 μm feature in the spectra of oxygen-rich asymptotic giant branch stars. I. Corundum and spinel", 2006, *Astrophysical Journal*, **640**, 971-981.
9. Speck, Angela K., Thompson, Grant D.*, Hofmeister, Anne M., "The Effect of Stellar Evolution on SiC Dust Grain Sizes", 2005, *Astrophysical Journal*, **634**, 426-435.
10. Dijkstra, C.*, Speck, A.K.; Reid, R. B.*, Abraham, P., "The 10 μm Feature of M-Type Stars in the Large Magellanic Cloud and the Dust Condensation Sequence" 2005, *Astrophysical Journal Letters*, **633**, 133-136.
11. Meixner, M., McCullough, P.R., Hartman, J., Son, M., Speck, A.K., "Molecular Hydrogen Knots in the Helix Nebula" 2005, *Astronomical Journal*, **130**, 1784-1794.
12. Speck, A.K., Hofmeister, A.M., "Processing of presolar grains around post-AGB stars: silicon carbide as the carrier of the "21" μm feature.", 2004, *Astrophysical Journal*, **600**, 986-991.
13. O'Hara, Timothy B., Meixner, Margaret, Speck, Angela K., Ueta, Toshiya, Bobrowsky, Matthew, "The Dust Ring of Luminous Blue Variable Candidate HD 168625: Infrared Observations and Model Calculations" 2003 *Astrophysical Journal*, **598**, 1255-1264.
14. Hofmeister, A.M., Keppel, E. & Speck, A.K., "Absorption and reflection infrared spectra of MgO and other diatomic compounds" 2003, *Monthly Notices of the Royal Astronomical Society*, **345**, 16-38.
15. Speck, A.K., Meixner, M., Jacoby, G.H. & Knezek, P., "Molecular hydrogen in the Ring Nebula: clumpy photo-dissociation regions" 2003, *Publications of the Astronomical Society of the Pacific*, **115**, 170-177.
16. Meixner, M., Ueta, T., Bobrowsky, M., & Speck, A.K., "Two Subclasses of ProtoPlanetary Nebulae: Model Calculations" 2002, *Astrophysical Journal*, **571**, 936-946.
17. Speck, A.K., Meixner, M., Fong, D., McCullough, P.R., Moser, D. & Ueta, T., "Large-scale extended emission around the Helix Nebula: dust, molecules, atoms and ions." 2002, *Astronomical Journal*, **123**, 346-361.
18. Speck, A.K., Meixner, M. & Knapp, G.R., "Discovery of parsec-sized dust shells around AFGL2688 and AFGL 618" 2000, *Astrophysical Journal Letters*, **545**, L145-L148.
19. Speck, A.K., Barlow, M.J., Sylvester, R.J., & Hofmeister, A.M., "Dust features in the 10- μm infrared spectra of oxygen-rich evolved stars" 2000, *Astronomy & Astrophysics Supplement Series*, **146**, 437-464.
20. Speck, A.K., Hofmeister, A.M., & Barlow, M.J., "Silicon Carbide: The Problem with Laboratory Spectra" 2000, In *Thermal Emission Spectroscopy of Dust, Disks, and Regoliths*, Eds: Sitko M.L., Sprague A.L. & Lynch D.K., ASP Conference Series, vol. 196, 281-290.
21. Hofmeister, A.M., Rosen, L.J., Speck, A.K., "IR spectra of nano- and macro-crystals: the overriding importance of optical path" 2000, In *Thermal Emission Spectroscopy of Dust, Disks, and Regoliths*, Eds: Sitko M.L., Sprague A.L. & Lynch D.K., ASP Conference Series, vol. 196, 291-299.
22. Bowey, J. E., Adamson, A. J., Speck, A.K., "Simulation of 10 μm Astronomical Spectra with Mixtures of Crystalline and Amorphous Silicates" 2000, In *Thermal Emission Spectroscopy of Dust, Disks, and Regoliths*, Eds: Sitko M.L., Sprague A.L. & Lynch D.K., ASP Conference Series, vol. 196, 31-39.
23. Speck, A.K., Hofmeister, A.M., & Barlow, M.J., "The silicon carbide problem: astronomical and meteoritic evidence" 1999, *Astrophysical Journal Letters*, **513**, L87-L90.
24. Cohen, M., Barlow, M.J., Sylvester, R.J., Liu, X.-W., Cox, P., Lim, T., Scmitt, B. & Speck, A.K., "Ice, silicates and PAH emission features in the ISO spectrum of the carbon-rich planetary nebula CPD-56 8032" 1999, *Astrophysical Journal Letters*, **513**, L135-L138.
25. Speck, A.K., Barlow, M.J., & Skinner, C.J., "The nature of the silicon carbide in carbon star outflows" 1997, *Monthly Notices of the Royal Astronomical Society*, **288**, pp431-456.
26. Speck, A.K., Barlow, M.J., & Skinner, C.J., "The nature of silicon carbide: astronomical observations vs meteoritic evidence" 1997, *Meteoritics & Planetary Science*, **32**, No. 5, 702-712.

27. Franchi, I.A., Bland, P., Berry, F.J., Speck, A., & Pillinger, C.T., "The influence of weathering on the measured oxygen isotopic composition of ordinary chondrites" 1994, *Meteoritics*, 29, 467.

Conference Proceedings:

28. Adrian Corman*, Grant Thompson*, Angela Speck & Catharinus Dijkstra*, "The Carbon Star Dust Sequence: Evolution of the Silicon Carbide in Dust Circumstellar Outflows of Carbon Stars", 2007, in Proceedings of *Why Galaxies Care About AGB Stars*, editors: F. Kerschbaum, C. Charbonnel & R. Wing, in press.
29. Angela Speck, Toshiya Ueta and the MIRIAD TEAM, "Spitzer/MIPS Imaging of the Extremely Extended Dust Shell(s) around R Hya", 2006, In Proceedings of *IAU Symposium 234: Planetary Nebulae in Our Galaxy and Beyond*, editors: M.J. Barlow. & R.H. Mendez, in press
30. Adrienne Dove*, Angela Speck, "CLOUDY modeling of weird Far-IR emission in the central zone of the Helix Nebula", 2006, In Proceedings of *IAU Symposium 234: Planetary Nebulae in Our Galaxy and Beyond*, editors: M.J. Barlow. & R.H. Mendez, in press
31. Josh Tartar*, Sarah Eyermann*, Angela Speck, Margaret Meixner, "HST Study of the Molecular Gas in Planetary Nebulae", 2006, In Proceedings of *IAU Symposium 234: Planetary Nebulae in Our Galaxy and Beyond*, editors: M.J. Barlow. & R.H. Mendez, in press
32. C. Dijkstra*, A. K. Speck, R.B. Reid*, C. Markwick-Kemper, J. Leisenring, "Circumstellar dust in the Large Magellanic Cloud", 2006, In Proceedings of *Stellar Evolution at Low Metallicity: Mass Loss, Explosions, Cosmology*, editors: Lamers, Langer, Nugis & Annuk, in press
33. Eyermann, S. E.*, Speck, A. K., Meixner, M., McCullough, P. R., Hora, J., "The Nature and Origin of Molecular Knots in Planetary Nebulae", 2006, *Planetary Nebulae as Astronomical Tools*. AIP Conference Proceedings, 804, 145.
34. Speck, A.K., Meixner, M., & Elitzur, M., "Episodic Mass Loss on the Timescale of Thermal Pulses: Radiative Transfer Modeling" 2003, In the proceedings of the 3rd *Asymmetrical Planetary Nebulae Conference*, Eds. M.Meixner & J.Kastner, ASP Conference Proceedings, Vol. 313. San Francisco: Astronomical Society of the Pacific, 2004., p.303.
35. Meixner, M., McCullough, P., Hartman, J., O'Dell, R., Speck, A.K., "The Hubble Helix" 2003, In the proceedings of the 3rd *Asymmetrical Planetary Nebulae Conference*, Eds. M.Meixner & J.Kastner, ASP Conference Proceedings, Vol. 313. San Francisco: Astronomical Society of the Pacific, 2004., p.234.
36. Speck, A.K., Meixner, M., Nenkova, M. & Elitzur, M., "Radiative transfer modeling of periodic mass-loss enhancements during the AGB phase" 2002, In the proceedings of the *Workshop on Mass-losing Pulsating Stars and their Circumstellar Matter*, Eds. Y. Nakada & M. Honma, 241.
37. Speck, A.K., Meixner, M., Knezek, P. & Jacoby, G.H. "High resolution molecular hydrogen imaging of the Ring nebula" 2003, In the proceedings of the *IAU Symposium 209, Planetary Nebulae: Their Evolution and Role in the Universe*, Eds. S. Kwok, M. Dopita & R. Sutherland, 271.
38. Speck, A.K., & Hofmeister, A.M., "Silicon Carbide as the Carrier of the 21 μ m feature", 2003, In the proceedings of the *IAU Symposium 209, Planetary Nebulae: Their Evolution and Role in the Universe*, Eds. S. Kwok, M. Dopita & R. Sutherland, 315.
39. Speck, A.K., Meixner, M., Fong, D. McCullough, P.R., Moser, D.E. & Ueta, T., " Large-scale extended emission around the Helix Nebula" 2003, In the proceedings of the *IAU Symposium 209, Planetary Nebulae: Their Evolution and Role in the Universe*, Eds. S. Kwok, M. Dopita & R. Sutherland, 316.
40. Speck, A.K., Meixner, M., Fong & Ueta, T., "ISOPHOT Observations of Post-AGB Stars: Fossil Records of Mass Loss" 2002, In proceedings of the *ISOPHOT Workshop on P32 Oversampled Mapping*, Eds. B. Schulz, S. Peschke, ESA-SP 482, 93.

41. Speck, A.K., Meixner, M. & Ueta, T., "Big, bumpy dust shells around protoplanetary nebulae" 2001, In proceedings of *Post-AGB objects as a phase of stellar evolution*, Eds. R. Szczerba, S.K. Gorny, Kluwer, Dordrecht, 333.
42. Ueta, T., Speck, A.K., Meixner, M., Dayal, A., Deutsch, L.K., Fazio, G., Hora, J.L., Hoffmann, W.F., "Spatial Distributions of Multiple Dust Components in the PPN/PN Circumstellar Dust Shells" 2001, In proceedings of *Post-AGB objects as a phase of stellar evolution*, Eds. R. Szczerba, S.K. Gorny, Kluwer, Dordrecht, 339.
43. Speck, A.K., Meixner, M., Ueta, T. & Knapp, G.R., ". ISOPHOT observations of protoplanetary nebulae: evidence for extremely extended dust shells around post-AGB objects" 2001, In proceedings of *Tetons 4: Galactic Structure, Stars and the Interstellar Medium*, Eds. C.E. Woodward, M.D. Bica, and J.M. Shull, A.S.P. conf. ser. 231, 550.
44. Speck, A.K., Barlow, M.J., & Sylvester, R.J., "Mineralogy of dust around oxygen-rich evolved stars" 2001, In proceedings of *Tetons 4: Galactic Structure, Stars and the Interstellar Medium*, Eds. C.E. Woodward, M.D. Bica, and J.M. Shull, A.S.P. conf. ser. 231, 553.
45. Speck, A.K., Meixner, M., & Knapp, G.R., "Circumstellar Dust Around Post-AGB Stars" 2000, In Proceedings of *ISO Beyond Point Sources: Studies of Extended Infrared Emission*, September 14-17, 1999, ISO Data Centre, Villafranca del Castillo, Madrid, Spain. Edited by R. J. Laureijs, K. Leech and M. F. Kessler, ESA-SP 455, 2000. p. 83.
46. Hofmeister, A.M., Keppel, E.T., Bowey, J.E., & Speck, A.K., "Causes of artifacts in the infrared spectra of powders" 2000, In Proceedings of *ISO beyond the peaks: The 2nd ISO workshop on analytical spectroscopy*, February 2-4, 2000, at ISO Data Centre, Villafranca del Castillo, Madrid, Spain. Edited by A. Salama, M.F.Kessler, K. Leech & B. Schulz. ESA-SP 456, 2000. p 343.
47. Speck, A.K., & Barlow, M.J., "UIR Bands in Carbon Stars" 1997, *Astrophysics & Space Science*, 251 pp115-121. Also in *Dust & Molecules in Evolved Stars: Conference Proceedings*
48. Speck, A.K., Barlow, M.J., & Skinner, C.J., "Observations of the 11 micron Silicon Carbide Feature in Carbon Star Shells" 1996, In *From Stardust to Planetesimals: Contributed Papers*, Eds: M.E.Kress, A.G.G.M. Tielens and Y.J. Pendleton, NASA Conf. Publ. 3343, California, pg 61.

Selected Abstracts

1. Dust at Low Metallicity: Spitzer Observations of AGB Stars in NGC 6822
Schuyler Van Dyk, Ciska Kemper, Angela Speck, Ryzsard Szczerba, Margaret Meixner, E. Peeters & T.Ueta
American Astronomical Society Meeting 209, Seattle, WA, January 2007, #168.13
2. Laboratory Infrared Optical Constants and Reflectance Spectra of Silicon Carbide
Karly M. Pitman, Anne M. Hofmeister & Angela K. Speck
American Astronomical Society Meeting 209, Seattle, WA, January 2007, #06.02
3. Spitzer/MIPS infrared imaging of extremely extended circumstellar shells - TALK
Angela Speck & the MIRIAD team
Why Galaxies Care About AGB Stars, Vienna, Austria, August 7-11th 2006.
4. The Carbon Star Dust Sequence: Evolution of the SiC in Dust Circumstellar Outflows of C-Stars - POSTER
Adrian Cormann*, Grant Thompson*, Angela Speck & Catharinus Dijkstra*
Why Galaxies Care About AGB Stars, Vienna, Austria, August 7-11th 2006.
5. SiO₂ Around O-rich AGB Stars - Astromineralogy & The "13 μ m" Feature – POSTER
Kyle DePew*, Angela Speck, Anthony Smith*, Catharinus Dijkstra* & Anne Hofmeister.
Why Galaxies Care About AGB Stars, Vienna, Austria, August 7-11th 2006.
6. Tracing the mass loss Histories of post-AGB Stars : ISOPHOT imaging – POSTER
B.M. Mchunu*, Angela Speck & Margaret Meixner
Why Galaxies Care About AGB Stars, Vienna, Austria, August 7-11th 2006.

7. CLOUDY Modeling of Weird Far-IR Emission in the Central Zone of the Helix Nebula - POSTER
Adrienne Dove* & [Angela Speck](#) - POSTER
IAU Symposium 234: Planetary Nebulae in our Galaxy and Beyond, Waikaloa, HI, April 3-7 2006.
8. Spitzer/MIPS Infrared Imaging of the Extremely Extended Circumstellar Dust Shells - POSTER
[Angela K. Speck](#), Toshiya Ueta, Robert Stencel & the MIRAD team.
IAU Symposium 234: Planetary Nebulae in our Galaxy and Beyond, Waikaloa, HI, April 3-7 2006.
9. An HST Study of the Molecular Gas in Planetary Nebulae - POSTER
Josh Tartar*, [Angela Speck](#), & Sarah Eyermann*
IAU Symposium 234: Planetary Nebulae in our Galaxy and Beyond, Waikaloa, HI, April 3-7 2006.
10. The 3 μ m water ice/vapour feature of (post-)AGB stars - POSTER
Dijkstra, C.*, Justtanont, K., Dominik, C., Waters, L., Matsuura, M., [Speck, A. K.](#), Cami, J., Yamamura, I.
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.18
11. Tracing the mass-loss histories of (post-)AGB stars: ISOPHOT imaging - POSTER
Mchunu, B. M.*, [Speck, A. K.](#) Meixner, M.
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.17
12. SiO₂ Around O-rich AGB Stars - Mineralogy & The "13 μ m" Feature - POSTER
DePew, K. D.*, [Speck, A. K.](#), Dijkstra, C.*, Hofmeister, A. M.
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.16
13. Spitzer/MIPS Infrared Imaging of the Extremely Extended Circumstellar Dust Shell of HD 161796 - POSTER
[Speck, A. K.](#), Ueta, T., Stencel, R., MIRIAD Collaboration
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.15
14. Radiative Transfer Modeling of the Extended Dust Shell of AFGL 618 - POSTER
Tartar, J.*, [Speck, A.](#), Meixner, M., Nenkova, M., Elitzur, M.
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.14
15. The Carbon Star Dust Sequence: Evolution of the SiC Dust Circumstellar Outflows of C-Stars - POSTER
Thompson, G. D.*, [Speck, A. K.](#), Dijkstra, C.*
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.07
16. An Investigation of the Dust Shells Around Carbon Stars Using Radiative Transfer Modeling - POSTER
Corman, A. B.*, [Speck, A. K.](#)
American Astronomical Society Meeting 207, Washington, DC, January 2006 #182.05
17. HST study of the molecular gas in planetary nebulae - POSTER
Hamacher, D.*, Eyermann, S.*, [Speck, A. K.](#), Meixner, M.
American Astronomical Society Meeting 207, Washington, DC, January 2006 #08.08
18. Mineralogy of Dust in the Outflows of Asymptotic Giant Branch Stars - ORAL
[Speck, A.K.](#)
American Astronomical Society Meeting 206, Minneapolis, MN, June 2005 #28.02 (invited talk)
19. Submillimeter Imaging of Fossil Dust Shells around Post-AGB Stars - POSTER
Wilson, K.*, [Speck, A.](#), Lis, D., Meixner, M.
American Astronomical Society Meeting 206, Minneapolis, MN, June 2005 #08.04
20. Modeling Periodic Mass-loss Changes in the Fossil Shells around Post-AGB Stars - POSTER
Tartar, J.*, [Speck, A.](#), Meixner, M., Elitzur, M.
American Astronomical Society Meeting 206, Minneapolis, MN, June 2005 #06.06
21. The Nature and Evolution of Silicon Carbide in the Outflows of Carbon Stars - POSTER
Thompson, G. D.*, [Speck, A. K.](#), Hofmeister, A. M.
American Astronomical Society Meeting 206, Minneapolis, MN, June 2005 #06.05

22. Dust around evolved stars in the Magellanic Clouds - POSTER
Reid, B.* , Speck, A., Dijkstra, R.*
American Astronomical Society Meeting 206, Minneapolis, MN, June 2005 #06.03
23. The Evolution of Molecular Hydrogen in Planetary Nebulae - POSTER
Eyermann, S. E.* , Speck, A.K.
American Astronomical Society Meeting 205, San Diego, CA, January 2005 #138.11
24. Astromineralogy of Intermediate Mass Evolved Stars in the Magellanic Clouds - POSTER
Reid, R. B.* , Speck, A.K.
American Astronomical Society Meeting 205, San Diego, CA, January 2005 #58.03
25. Stardust: observational evidence of mass-loss processes in the history of the Egg Nebula - POSTER
Tartar, J.* , Speck, A.K.
American Astronomical Society Meeting 205, San Diego, CA, January 2005 #58.02
26. Silicon carbide: a case study in the astrophysics of stardust - POSTER
Speck, A.K.
American Astronomical Society Meeting 205, San Diego, CA, January 2005 #58.01
27. Observational Evidence for Presolar Grains around Oxygen-rich Evolved Stars - POSTER
Speck, A.K., Hofmeister, A. M.
American Astronomical Society Meeting 203, Atlanta, GA, January 2004 #49.06
28. Processing of presolar grains around post-AGB stars: SiC as the carrier of the $21\mu\text{m}$ feature - POSTER
Hofmeister, A. M., Speck, A.K.
American Astronomical Society Meeting 203, Atlanta, GA, January 2004 #49.09
29. Episodic Mass Loss on the Timescale of Thermal Pulses: Radiative Transfer Modeling - POSTER
Miller, B. A.* , Speck, A.K., Meixner, M.
American Astronomical Society Meeting 203, Atlanta, GA, January 2004 #49.08
30. The carrier of the $13\mu\text{m}$ feature in the spectra of O-rich AGB stars - POSTER
Mora, M. Y.* , Speck, A.K.,
American Astronomical Society Meeting 203, Atlanta, GA, January 2004 #137.02
31. Observational Evidence for Presolar Grains around Oxygen-rich Evolved Stars - ORAL
Speck, A.K., Hofmeister, A. M., Mora, M.*
Workshop on Cometary Dust in Astrophysics, Mt Rainier, WA, August 2003
32. Absorption and reflection IR spectra of MgO and other diatomic compounds. - POSTER
Hofmeister, A. M., Speck, A.K.
Astrophysics of Dust Conference, Estes Park, CO, May 2003
33. Episodic Mass Loss on the Timescale of Thermal Pulses: Submillimeter Observations of Dust Shells. - POSTER
Speck, Angela, Lis, Darek, Meixner, Margaret, Knapp, Gillian
Astrophysics of Dust Conference, Estes Park, CO, May 2003
34. Episodic Mass Loss on the Timescale of Thermal Pulses: Radiative Transfer Modeling - POSTER
Speck, Angela, Nenkova, Maia, Meixner, Margaret, Elitzur, Moshe, Knapp, Gillian
Astrophysics of Dust Conference, Estes Park, CO, May 2003
35. The Dust Ring of LBV Candidate HD 168625 - POSTER
O'Hara, T.B., Meixner, M., Speck, A.K., Ueta, T., Bobrowsky, M.
American Astronomical Society Meeting 201, Seattle, WA, January 2003
36. Near-IR and BIMA CO Observations of the Red Rectangle - POSTER
Doering, R., Meixner, M., Fong, D., Zalucha, A., Maxham, A., Speck, A.K.
American Astronomical Society Meeting 201, Seattle, WA, January 2003

37. Periodic Enhancements in Mass Loss on the AGB: Radiative transfer modeling of the parsec-sized dust shell around the Egg Nebula - POSTER
Speck, A.K., Meixner, M., Nenkova, M. & Elitzur, M.,
"Workshop on Mass-losing Pulsating Stars and their Circumstellar Matter, Sendai Japan, May 2002.
38. Processing of Presolar Grains Around Post-AGB Stars: Silicon Carbide as the Carrier of the 21 μ m Feature - ORAL
Speck, A.K., & Hofmeister, A.M.,
Lunar & Planetary Science Conference, Houston, 33, #1155, March 2002.
39. Formation of Presolar Crystalline Silicates: The Effect of ²⁶Al - ORAL
Speck, A.K., Kemper, F., Whittington, A.G., Molster, F.J. & Herwig, F.,
Lunar & Planetary Science Conference, Houston, 33, #1155, March 2002.
40. Large-scale extended emission around the Helix Nebula - ORAL
Speck, A.K., Meixner, M., Fong, D. McCullough, P.R., Moser, D.E. & Ueta, T.
American Astronomical Society Meeting 199, Washington DC, January 2002
41. Dust around oxygen-rich evolved stars – ORAL
Speck, A.K., Hofmeister, A.M., Barlow, M.J. & Sylvester, R.J.
Workshop on Interstellar Silicates, Leiden, The Netherlands, April 2001,
42. Observations of Circumstellar Dust Shells Around Proto-Planetary Nebulae - POSTER
Meixner, M, Speck, A.K., Ueta, T., Knapp, G., Hoffmann, W., Hinz, P.M., Hora, J., Fazio, G., Deutsch, L.
American Astronomical Society Meeting 197, #06.13
43. Infrared Studies of Silicon Carbide - POSTER,
Speck, A.K., & Hofmeister, A.M.
at 63rd Annual Meeting of the Meteoritical Society: Chicago, IL, August 28 - September 1, 2000:
44. Observational Evidence for Presolar Grains around Oxygen-rich Evolved Stars - ORAL ,
Speck, A.K., Hofmeister, A.M. Barlow, M.J. & Sylvester, R.J.,
at 63rd Annual Meeting of the Meteoritical Society: Chicago, IL, August 28 - September 1, 2000
45. Silicon Dioxide in the Infrared Spectra of Oxygen-rich Evolved Stars - POSTER,
Speck, A.K., Barlow, M.J., & Sylvester, R.J.,
at Astrochemistry: From Molecular Clouds to Planetary Systems, IAU Symposium 197, Cheju Island, South Korea, Aug 23-27, 1999
46. Resolution of the SiC problem: astronomical and meteoritic evidence reconciled - POSTER
Speck, A.K., Hofmeister, A.M., & Barlow, M.J.,
at Asymptotic Giant Branch Stars, IAU Symposium 191 Poster Session, #P3-21, held in Montpellier, France, Aug 28 – Sept 1, 1998
47. Silicon Carbide: astronomical and meteoritic evidence reconciled – POSTER
Speck, A.K., Hofmeister, A.M., & Barlow, M.J.,
at the Faraday Discussion no. 109: Chemistry and Physics of Molecules and Grains in Space, The University of Nottingham, UK, 15-17 April 1998. - *joint winner of the Skinner Poster Prize.*
48. Silicon Carbide absorption features in the outflows of carbon stars - POSTER
Speck, A.K., & Barlow, M.J.,
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(I was involved in this work after the abstract was submitted - my name does not appear on this abstract - but it did appear on the poster - the other authors can confirm my involvement in this work.)