

Refereed Publications

2023

P-91 is listed under „Invited Talks & Colloquia“

2022

P-90 Pahler A., Böttger J., Bougueroua S., Emberger M., Janson O., Jokschas T., Keilig T., Klinkner S., Krabbe A., Lengowski M., Maier P., Taheran M. 2022: *Hardware qualification for scientific ballooning missions*, *Advances in Space Research* 71, is. 6, p. 2702-2710

P-89 Beck A., Leboutteiller V., Madden S.C., Iserlohe C., Krabbe A., Ramambason L., Fischer C., Kaźmierczak-Barthel M., Latzko S.T., Pérez-Beaupuits J.P. 2022: *Infrared view of the multiphase ISM in NGC 253. I. Observations and fundamental parameters of the ionised gas*, *A&A* vol. 665, id. A85, 12 pp

P-88 Iserlohe C., Vacca W.D., Fischer C., Fischer N., Krabbe A. 2022, *Probing the Atmospheric Precipitable Water Vapor with SOFIA, Part III. Atlas of Seasonal Median PWV Maps from ERA5, Implications for FIFI-LS and in situ Comparison Between the ERA5 and MERRA-2 Atmospheric Re- analyse*, *PASP* 134, id. 085001, 30pp

P-87 Spinoglio L., Fernández-Ontiveros J.A., Malkan M.A., Kumar S., Pereira-Santaella M., Pérez-Díaz B., Pérez-Montero E., Krabbe A., Vacca W., Colditz S., Fischer C. 2022, *SOFIA Observations of Far-IR Fine-structure Lines in Galaxies to Measure Metallicity*, *ApJ* 906, 55

2021

P-86 Bryant A., Krabbe A. 2021, *The episodic and multiscale Galactic Centre*, *NAREV* 93, id. 101630

P-85 Colditz S., Looney L.W., Bigiel F., Fischer C., Fischer J., Hailey-Dunsheath S., Herrera-Camus R., Krabbe A., LeDuc H., Wong T., Zmuidzinas J. 2021, *Upgrading the field-imaging far-infrared line spectrometer for the Stratospheric Observatory for Infrared Astronomy with kinetic inductance detectors: enabling large sample (extragalactic) surveys*, *JATIS* vol. 7, <https://doi.org/10.1117/1.JATIS.7.2.025002>

P-84 Sperling T., Eislöffel J., Fischer C., Nisini B., Giannini T., Krabbe A. 2021, *On the evolution of the atomic component in protostellar outflows*, *A&A* 650, id. A173, 23 pp

P-83 Iserlohe C., Fischer C., Vacca W.D., Fischer N., Colditz S., Krabbe A. 2021, *Probing the Atmospheric Precipitable Water Vapor with SOFIA. II. Atmospheric Models from ECMWF*, *PASP* vol. 133, id.055002, 15pp.

P-82 Fischer C., Iserlohe C., Vacca W., Fadda D., Colditz S., Fischer N., Krabbe A. 2021, *Probing the Atmospheric Precipitable Water Vapor with SOFIA, Part I, Measurements of the Water Vapor Overburden with FIFI-LS*, *PASP* vol. 133 id.055001, 10pp.

2020

P-81 Bigiel F., de Looze I., Krabbe A., Cormier D., Barnes A.T., Fischer C., Bolatto A.D., Bryant A., Colditz S., Geis N., Herrera-Camus R., Iserlohe C., Klein R., Leroy A.K., Linz H., Looney L.W., Madden S.C., Poglitsch A., Stutzki J., Vacca W.D. 2020, *SOFIA/FIFI-LS Full-disk [C ii] Mapping and CO-dark Molecular Gas Across the Nearby Spiral Galaxy NGC6946*, *A&A*, 903, 30

P-80 Sperling T., Eislöffel J., Fischer C., Nisini B., Giannini T., Krabbe A. 2020, *Probing the hidden atomic gas in Class I jets with SOFIA*, *A&A*, 642, A216

P-79 Chevance M., Madden S.C., Fischer C., Vacca W.D., Leboutteiller V., Fadda D., Galliano F., Indebetouw R., Kruijssen J.M.D., Lee M.-Y., Poglitsch A., Polles F.L., Cormier D., Hony S., Iserlohe C., Krabbe A., Meixner M., Sabbi E., Zinnecker H. 2020, *The CO-dark molecular gas mass in 30 Doradus*, *MNRAS* vol. 494, pp.5279 – 5292

2019

P-78 Iserlohe C., Bryant A., Krabbe A., Beckmann S., Colditz S., Fischer C., Fumi F., Geis N., Henning T. K., Hönle R., Klein R., Looney L.W., Poglitsch A., Raab W., Rebell F., Vacca W.D. 2019, *FIFI-LS Observations of the Circumnuclear Ring— Probing the High-density Phase of the PDR*, *ApJ*, 885, 169, DOI: 10.3847/1538-4357/ab391f

2018

P-77 is listed under „Invited Talks & Colloquia“

P-76 Colditz S., Beckmann S., Bryant A., Fischer C., Fumi F., Geis N., Hamidouche M., Henning T., Hönle R., Iserlohe R., Klein R., Krabbe A., Looney L., Poglitsch A., Raab W., Rebell F., Rosenthal D., Savage M.,

- Schweitzer M., Trinh C., Vacca W. 2018, *Spectral and Spatial Characterization and Calibration of FIFI-LS - the Field Imaging Spectrometer on SOFIA*, JAI 7, id. 1840004-(12)556
- P-75 Fischer C., Beckmann S., Bryant A., Colditz S., Fumi F., Geis N., Hamidouche M., Henning T., Hönle R., Iserlohe R., Klein R., Krabbe A., Looney L., Poglitsch A., Raab W., Rebell F., Rosenthal D., Savage M., Schweitzer M., Trinh C., Vacca W. 2018, *FIFI-LS: The Field-Imaging Far-Infrared Line Spectrometer on SOFIA*, JAI 7, id. 1840003-556
- P-74 Lammen Y., Reinacher A., Greiner B., Wagner J., Krabbe A. 2018, *Increasing the SOFIA Secondary Mirror Mechanism's fast steering capability by identification of a structural resonance and its subsequent elimination through mass re-distribution*, JAI 7, id. 1840001
- 2017
- P-73 Schindler K., Wolf J., Bardecker J., Olsen A., Müller T., Kiss C., Ortiz J. L., Braga-Ribas F., Camargo J. I. B., Herald D., Krabbe A. 2017, *Results from a triple chord stellar occultation and far-infrared photometry of the trans-Neptunian object (229762) 2007 UK₁₂₆*, A&A 600, id. A12, 16pp
- P-72 A. Caratti o Garatti, B. Stecklum, R. Garcia Lopez, J. Eislöffel, T. P. Ray, A. Sanna, R. Cesaroni, C. M. Walmsley, R. D. Oudmaijer, W. J. de Wit, L. Moscadelli, J. Greiner, A. Krabbe, C. Fischer, R. Klein & J. M. Ibañez 2017, *Disk-mediated accretion burst in a high-mass young stellar object*, Nature Physics 13, 276 - 279
- 2014
- P-71 Temi P., Marcum P.M., Young E., Adams J.D., Adams S., Krabbe A., et al. 2014, *The SOFIA Observatory at the Start of Routine Science Operations: Mission Capabilities and Performance*, ApJS 212, 24
- 2013
- P-70 Krabbe A., Mehlert D., Röser H.-P. & Scorza C. 2013, *SOFIA, an Airborne Observatory for Infrared Astronomy*, European Journal of Physics, vol. 34, id: S161
- P-69 Iserlohe C., Krabbe A., Larkin J.E., Barczys M., McElwain M.W., Quirrenbach A., Weiss J., Wright S.A. 2013, *Near-infrared imaging spectroscopy of the inner few arcseconds of NGC 4151 with OSIRIS at Keck*, A&A 556, 136-162
- 2012
- P-68 is listed under „Invited Talks & Colloquia“
- P-67 Iserlohe C, Krabbe A., Larkin J. 2012, *The inner 200 parsecs of NGC4151 observed with OSIRIS*, in Journal of Physics: Conference Series: Astronomy at High Angular Resolution 2011: The central kiloparsec in galactic nuclei eds. C. Iserlohe, V. Karas, M. Krips, A. Eckart, S. Britzen and S. Fischer, vol. **372**, Issue I, id. 012014, 6 pp.
- P-66 Young E.T., Becklin E.E., Marcum P.M., ... Burgdorf M., ... Krabbe A., ... Röser H.-P., ... Wolf J. , & Zinnecker H. 2012, *Early Science with SOFIA, the Stratospheric Observatory For Infrared Astronomy*, ApJ, **749**, L17 (5pp)
- P-65 is listed under „Invited Talks & Colloquia“
- P-64 Srama R., Krüger H., Yamaguchi T., ..., Krabbe A., et al. 2012, *SARIM PLUS—sample return of comet 67P/CG and of interstellar matter*, ExA, vo. 33, issue 2-3, pp 723 – 751, <https://doi.org/10.1007/s10686-011-9285-7>
- 2011
- P-63 Gehrz R.D., Becklin E.E., De Buizer J., 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 (SOFIA)*, AdSpR, 48, 1004 - 1016
- 2010
- P-62 is listed under „Invited Talks & Colloquia“
- P-61 Angerhausen D., Krabbe A., & Iserlohe C. 2010, *Observing Exoplanets with SOFIA*, PASP, **122**, 1020
- 2009
- P-60 Hodapp K.W., Iserlohe C., Stecklum B., Krabbe A. 2009, *s Orionis IRS1 A and B: A Binary Containig a Proplyd*, Ap.J., 701, L100-L104
- 2008
- P-59 is listed under „Invited Talks & Colloquia“.

2007

- P-58 Mueller Sanchez F., Gal C., Eisenhauer F., Krabbe A., & Herbst T. 2007, *SERPIL/LIINUS a designs study for a Near Infrared Interferometric Integral field Spectrometer for the LBT*, AN, 328, 628
- P-57 Wright S.A., Larkin J.E., Barczys M., Erb D.K., Iserlohe C., Krabbe A., Law D.R., McElwain M.W., Quirrenbach A., Steidel C.C., & Weiss J. 2007, *OSIRIS Integral Field Spectroscopy Laser Guide Star Adaptive Optics Observation of a Star Forming Galaxy at $z \sim 1.5$* , ApJ, 658, 78 - 84
- P-56 Mc Elwain M.W., Metchev S.A., Larkin J., Barczys M., Iserlohe, C., Krabbe A., Quirrenbach A., Weiss J., & Wright S. 2007, *First High-Contrast Science with an Integral field Spectrograph: the Sub-Stellar Companion to GQ Lup*, ApJ, 656, 505 - 514

2006

- P-55 Larkin J., Barczys M., Krabbe A., Adkins S., Aliado T., Amico P., Brims G., Campbell R., Canfield J., Gasaway T., Honey A., Iserlohe C., Johnson C., Kress E., Lafreniere D., Magnone K., Magnone N., McElwain M., Moon J., Quirrenbach A., Skulason G., Song I., Spencer M., Weiss J., Wright S. 2006, *OSIRIS: A diffraction limited integral field spectrograph for Keck*, NewAR, 50, 362 - 364
- P-54 Quirrenbach A., Larkin J., Barczys M., Gasaway T., Iserlohe C., Krabbe A., McElwain M., Song I., Weiss J., Wright S 2006, *OSIRIS: AO-assisted integral-field spectroscopy at the Keck Observatory*, NewAR, 49, 639 - 646
- P-53 Krabbe A., Iserlohe C., Larkin J., Barczys M., McElwain M., Quirrenbach A., Song I., Weiss J. & Wright S. 2005, *Diffraction limited imaging spectroscopy of the SgrA* Region with the new OSIRIS Instrument at Keck*, ApJL, 642, L145 – L148

2005

- P-52 Angerhausen D., Krabbe A., & Iserlohe C. 2005, *NIR Imaging Spectroscopy of Extrasolar Planets*, AN, 326, 625

2004

- P-51 Krabbe A. 2004, *Zentren aktiver Galaxien*, Habilitationsschrift, Technische Universität Berlin.

2003

- P-50 Maiolino R., Comastri A., Gilli R., Nagar N. M., Bianchi S., Böker T., Colbert E., Krabbe A., Marconi A. Matt G., Salvati M. 2003, *Elusive active galactic nuclei*, MNRAS, 344, L59

2002

- P-49 is listed under „Invited Talks & Colloquia“.

2001

- P-48 Krabbe A., Böker T., & Maiolino, R. 2001, *N-band imaging of Seyfert nuclei and the mid-infrared-X-ray Correlation*, ApJ, **557**, 626-636
- P-47 Hübers H.-W., Schubert J., Krabbe A., Birk M., Wagner G., Semenov A., Gol'tsman G., Voronov B., & Gershenson E. 2001, *Parylene anti-reflection coating of a quasi-optical hot-electron-bolometric mixer at terahertz frequencies*, Infrared Phys. & Techn., **42**, 41 - 47

2000

- P-46 Brandner W., Sheppard S., Zinnecker H., Close L., Iwamuro F., Krabbe A., Maihara T., Motohara K., Padgett D., & Tokunaga A. 2000, *VLT-detection of two edge-on Circumstellar Disks in the ρ Oph dark cloud*, A&A, **364**, L13-L18
- P-45 Krabbe A., Sams B.J. III, Genzel R., Thatte N., & F. Prada 2000, *Near Infrared Imaging Spectroscopy of NGC 1275*, A&A, **354**, 439-452

1999

- P-44 Zinnecker H., Krabbe A., McCaughrean M., Stanke Th., Brandner W., Padgett D.L., Stapelfeldt K.R., & Yorke H.W. 1999, *First VLT/ISAAC images of the circumstellar environment of partially embedded young low-mass stars (solar-system analogs)*, A&A, **352**, L73 – L78

- P-42 & P-43 are listed under 2.

1998

- P-41 Böker T., Krabbe A., & Storey J.W.V. 1998, *Mid-Infrared [NeIII] Line emission from the nucleus of NGC 253*, Ap.J., **498**, L115 – L118

- P-40 Maiolino R., Krabbe A., Thatte N., & Genzel R. 1998, *Seyfert Activity and Nuclear Star Formation in the Circinus Galaxy*, Ap.J., **493**, 650 – 665
- 1997
- P-39 Böker T., Storey J.W.V., Krabbe A. & Lehmann T. 1997, *MANIAC: A new Mid- and Near-Infrared Array Camera*, P.A.S.P., **109**, 827 - 836
- P-38 Schinnerer E., Eckart A., Quirrenbach A., Böker T., Tacconi-Garman L.E., Krabbe A. & Sternberg A. 1997, *The Circum-Nuclear Starburst in NGC 7552: First Result from NIR Spectral Synthesis*, Ap.J., **488**, 174 - 194
- P-37 Colina L., Garcia Vargas M.L.G., Delgado R.M.G., Mas-Hesse J.M., Perez E., Alberdi A., & Krabbe A. 1997, *On the Origin of the Ultraviolet Continuum in Seyfert 2 Galaxies*, Ap.J., **488**, L71 – L74
- P-36 Colina L., Garcia Vargas M.L.G., Mas-Hesse J.M., Alberdi A. & Krabbe A. 1997, *Nuclear Spiral and Ring Star-forming Structures and the Starburst--Active Galactic Nucleus Connection in Barred Spirals NGC 3351 and NGC 4303*, Ap.J.L., **484**, L41 - L45
- P-35 Krabbe A. , Colina L., Thatte N., & Kroker H. 1997, *3D imaging spectroscopy of Mrk 231*, Ap.J.,**476**, 98 - 104
- P-34 Najarro F., Krabbe A., Genzel R., Lutz D., Kudritzki R.P., & Hillier D.J. 1997, *Quantitative spectroscopy of the Hel cluster in the Galactic center*, A. & A., **325**, 700 – 708
- P-33 Thatte N., Genzel R., Kroker H., Krabbe A., Tacconi-Garman L.E., Maiolino R., & Tecza M.1997, *The Nuclear Stellar Cluster in NGC 1068*, As. & Sp.Sc., **248**, 225 - 234
- P-31 & P-32 are listed under 2.
- 1996
- P-30 Tacconi-Garman L. E., Cameron M., Krabbe A., Kroker H., Thatte N., & Weitzel L., 1996, *3D: a new tool for probing the stars and ISM in AGN*, Vistas Astron., **40**, 227 – 229.
- P-29 Tacconi L. J., Blietz M., Cameron M., Downes D., Genzel R., Krabbe A., Sternberg A., Tacconi-Garman L. E. & Weitzel, 1996, *Kinematics and distribution of dense gas in Seyfert nuclei*, Vistas Astron., **40**, 23 – 26.
- P-28 Kroker H., Genzel R., Krabbe A., Tacconi-Garman L.E., Tecza M., Thatte N., & Beckwith S. 1996, *Near Infrared Spectroscopy of IRAS FSC10214+4724: Evidence for a starburst region around an AGN at z=2.3*, Ap.J. L., **463**, L55 - 58
- P-27 Weitzel L., Krabbe A., Kroker H., Thatte N., Tacconi-Garman L.E., Cameron M. & Genzel R. 1996, *3D: The Next Generation Near-Infrared Imaging Spectrometer*, Astron. & Astroph. Suppl., **119**, 531 - 546
- P-26 van der Werf P.P., Stutzki J., Sternberg A. & Krabbe A.,1996, *Structure and Chemistry of the Orion bar photon-dominated region*, A&A, **313**, 633
- P-25 Eckart A., Cameron M., Boller Th., Krabbe A., Blietz M., Nakai N., Wagner S.J., & Sternberg A. 1996, *The Starburst in the Wolf - Rayet Nucleus of the Liner NGC 6764*, Ap.J., **472**, 588
- P-24 Genzel R., Thatte N., Krabbe A., Eckart A., Kroker H., & Tacconi-Garman L.E. 1996, *The Dark Mass Concentration in the Central Parsec of the Milky Way*, Ap.J., **472**, 153 - 172
- P-23 Herbst T. M., Beckwith S. V. W., Glindemann A. Tacconi-Garman L. E., Kroker H., & Krabbe A., 1996, *A Near-Infrared Spectral Imaging Study of T Tau*, A.J., **111**, 2403
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- P-21 Poglitsch A., Krabbe A., Madden S.C., Nikola T., Geis N., Johansson L.E.B., Stacey G.J. & Sternberg A., 1995, *A Multi-Wavelength Study of 30 Doradus: The Interstellar Medium in a Low-Metallicity Galaxy*, Ap.J., **454**, 293 - 306
- P-20 Krabbe A., Genzel R., Eckart A., Najarro F., Lutz D., Cameron M., Kroker H., Tacconi-Garman L.E., Thatte N., Weitzel L., Drapatz S., Geballe T., Sternberg A. & Kudritzki R.-P., 1995, *The Nuclear Cluster of the Milky Way: Star Formation and Velocity Dispersion in the Central 0.5 Parsec*, Ap.J.Lett., **447**, L95
- P-19 Genzel R., Weitzel L., Tacconi-Garman L.E., Blietz M., Cameron M., Krabbe A., Lutz D. & Sternberg A., 1995, *Infrared Imaging and Spectroscopy of NGC 7469*, Ap.J., **444**, 129 - 145
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- P-17 Genzel R., Cameron M. & Krabbe A., 1993, *Infrared Spectroscopy and Imaging of Starburst Galaxies and AGNs*, *Astrophys. & Space Sci.*, **205**, 17 - 23
- P-16 Krabbe A., Sternberg A. & Genzel R., 1994, *Near Infrared Spectral Imaging of NGC 1808: Probing the Starburst*, *Ap.J.*, **425**, 72 - 90
- P-15 Lutz D., Genzel R., Krabbe A., Blietz M., Drapatz S., van der Werf P.P., Najarro F. & Hillier D.J., 1994, *Excitation of the inner pc of the galactic center: Results from near-infrared spectroscopy*, *Infrared Phys. Technol.*, **35**, 303 - 309
- P-14 Najarro F., Hillier D., Kudritzki R.P., Krabbe A., Genzel R., Lutz D., Drapatz S. & Geballe T., 1994, *The Nature of the Brightest Galactic Center HeI Emission Line Star*, *A.&A.*, **285**, 573 - 584
- P-13 Blietz M., Cameron M., Drapatz S., Genzel R., Krabbe A., van der Werf P., Sternberg A. & Ward M.J. 1994, *Near Infrared Spectroscopic Imaging of the Circum-Nuclear Environment of NGC 1068*, *Ap.J.*, **421**, 92 - 100
- 1993
- P-12 Krabbe A., Rotaciuc V., Storey J.W.V., Cameron M., Blietz M., Drapatz S., Hofmann R., Sämman G. & Genzel R., 1993, *FAST: A Near-Infrared Imaging Fabry-Perot Spectrometer*, *P.A.S.P.*, **105**, 1472 - 1481
- P-11 Lutz D., Krabbe A. & Genzel R., 1993, *Excitation of the [FeIII] Bubble Surrounding the Galactic Center "Mini-Cavity"*, *Ap.J.*, **418**, 244 - 254
- P-10 Krabbe A., 1993, *Near Infrared Imaging Spectroscopy of Galactic Nuclei*, *Rev. Mod. Astron.*, **6**, 103 - 116
- P-09 Clements D.L., van der Werf P.P., Krabbe A., Blietz M., Genzel R. & Ward M.J., 1993, *Extended H α emission from IRAS F10214+4724: Starburst or AGN?*, *M.N.R.A.S.*, **262**, L23 - L26
- P-08 Forbes D.A., Ward M.J., Rotaciuc V., Blietz M., Genzel R., Drapatz S., van der Werf P. & Krabbe A., 1993, *High Resolution Imaging of [FeII] 1.64 μ m, Brackett- γ and H $_2$ 1-0 S(1) Emission in the Starburst Galaxy NGC 253*, *Ap.J. Lett.*, **406**, L11 - L14
- P-07 van der Werf P.P., Genzel R., Krabbe A., Blietz M., Drapatz S., Ward M.J. & Forbes D.A., 1993, *Near - Infrared Line Imaging of NGC 6240: Global Shock and Nuclear Starburst*, *Ap.J.*, **405**, 522 - 537
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- P-06 Eckart A., Genzel R., Krabbe A., Hofmann R., van der Werf P. & Drapatz S., 1992, *Spatially resolved near-infrared emission and a bubble of hot gas in the central active region of the Galaxy*, *Nature*, **355**, 526 - 529
- 1991
- P-05 Krabbe A., Genzel R., Drapatz S. & Rotaciuc V., 1991, *A Cluster of HeI Emission Line Stars in the Galactic Center*, *Ap.J. Lett.*, **382**, L19 - L22
- P-04 Rotaciuc V., Krabbe A., Cameron M., Drapatz S., Genzel R., Sternberg A. & Storey J.W.V., 1991, *High-Resolution Imaging of Brackett- γ and H $_2$ 1-0 S(1) Emission in the Seyfert Galaxy NGC 1068*, *Ap.J.Lett.*, **370**, L23 - L26
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- P-03 Krabbe A., 1987, *Ein Infrarot - Gitterspektrograph für die Calar Alto Teleskope*, Ph.D. Thesis, MPI-Astronomie, Heidelberg
- P-02 Krabbe A., Lemke D. & Proetel K., 1986, *A Chopping secondary mirror for a cooled infrared telescope*, *Applied Optics*, **25**, 523-527
- P-01 Krabbe A., 1982, *Ein Sekundärspiegelchopper für das Flüssighelium gekühlte Weltraumteleskop GIRL*, Diplom Thesis, MPI-Astronomie, Heidelberg