

JASON MELBOURNE

Curriculum Vitae

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California Institute of Technology
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Education	DOCTOR OF PHILOSOPHY, ASTRONOMY & ASTROPHYSICS University of California, Santa Cruz Thesis: “The Optical and Infrared Evolution of Galaxies” (Advisors: C. Max & D. C. Koo)	May 2006
	MASTER OF ARTS, ASTRONOMY Wesleyan Univeristy Thesis: “Metal Abundances in KISS Galaxies” (Advisor J. J. Salzer)	May 2001
	BACHELOR OF ARTS, PHYSICS & ASTRONOMY University of California, Berkeley	May 1995
Appoint- ments	POSTDOCTORAL FELLOW, Physics Department, California Institute of Technology	2007–
	POSTDOCTORAL FELLOW, Center for Adaptive Optics, UC Santa Cruz	2006–2007
Grants	TRANSFORMING UNDERGRADUATE STEM EXPERIENCES THROUGH THE NEXT GENERATION OF SCIENTIST AND ENGINEER EDUCATORS NSF, Department of Undergraduate Education, Collaborator \$600,000	2012 - 2015
	PANCHROMATIC HUBBLE ANDROMEDA TREASURY HST Multi-cycle Treasury Program, Caltech P.I. of sub-award \$93,000	2010 - 2012
	THE SITES AND TRIGGERS OF STAR FORMATION IN LARGE DISK GALAXIES SINCE $z = 1$ HST Archival Grant, AR-10965. P.I. \$53,000	2008
Major Research Programs	BLACK HOLE GROWTH, AND STELLAR EVOLUTION Tracing signatures of massive evolved stars near the centers of nearby AGN, these mass losing stars may be responsible for transporting gas onto the black holes.	2011–present
	ASYMPTOTIC GIANT BRANCH (AGB) STARS A study of AGB stars in nearby galaxies and star clusters. I showed the AGB contributes a large fraction of the near-infrared light of galaxies, but that recent models over-predict their contribution.	2009–present
	DUST OBSCURED GALAXIES A study of ultra-luminous infrared galaxies in the early universe. I led multiple papers on morphologies, black hole masses, and far-infrared dust properties of these extreme galaxies. I also organize our multi-institutional team meetings, write observing proposals, and plan future science.	2007–present
	LUMINOUS INFRARED GALAXIES (LIRGs) Morphologies and stellar populations of $z = 1$ LIRGs. I showed that the high star formation rates in $z = 1$ galaxies were occurring, primarily, in morphologically normal disks. My results suggest that the decline in star formation since $z = 1$ has been driven by gas depletion rather than a drop in merger rates, an alternative hypothesis.	2005–2007
	CENTER FOR ADAPTIVE OPTICS TREASURY SURVEY High spatial resolution near-infrared imaging of 300 $z \sim 1$ galaxies from Keck adaptive optics (AO). I developed AO observing techniques, built the first online AO database, and led papers on high- z	2005–2007

	supernova, galaxy mergers, and infrared luminous galaxies.	
	METALLICITIES OF DWARF GALAXIES	2000–2005
	Oxygen abundance of hundreds of low redshift dwarf galaxies. First to show that the metallicity-luminosity relation holds over roughly 10 magnitudes in luminosity.	
Instrumentation	GEMINI-N ADAPTIVE OPTICS WORKING GROUP	2012
	I was a co-lead of the extra-galactic team charged with designing a vision for the next generation Gemini-N adaptive optics instrument.	
	NIRES, A NEAR-INFRARED SPECTROGRAPH FOR KECK OBSERVATORY	2010–present
	I led the detector characterization, and showed that it would not achieve the required performance. With the University of Toronto, we have purchased a new detector. (P.I. Keith Matthews)	
	THIRTY METER TELESCOPE (TMT) SITE TESTING	2004
	I participated in a TMT site testing campaign on Mauna Kea. I assisted in deployment of kite and balloon born instrumentation, and helped synthesize the results. (P.I. Mark Chun)	
Selected Successful Proposals & Observing	THE STARBURST–AGN CONNECTION, P.I.	2012
	Keck Laser Guide Star Adaptive Optics Integral Field Spectroscopy of Nearby AGN	
	THE LOCAL GROUP INFRARED CLUSTER SURVEY, P.I.	2011
	Keck Laser Guide Star Adaptive Optics Imaging with NIRC2	
	THE PANCHROMATIC HUBBLE ANDROMEDA TREASURY, Co.I.	2010
	HST Multi-cycle Treasury Program for Multi-band Imaging Across Andromeda Galaxy.	
	REST-FRAME OPTICAL SPECTROSCOPY OF $z = 2$ DUST OBSCURED GALAXIES, P.I.	2009
	Palomar Near-IR Spectroscopy with TripleSpec	
	Keck Integral-Field Spectroscopy with OSIRIS	
	RESOLVED STELLAR POPULATIONS OF NEARBY GALAXIES, P.I.	2008
	Keck Laser Guide Star Adaptive Optics Imaging with NIRC2	
	A CALIBRATION DATABASE FOR STELLAR MODELS OF AGB STARS, Co.I.	2008
	HST Near-IR Imaging with WFC3, SNAP-11719	
	THE DISTRIBUTION OF WARM DUST IN LUMINOUS INFRARED GALAXIES, P.I.	2008–2009
	Gemini Mid-IR Imaging with TReCS	
	THE MORPHOLOGIES OF $z = 2$ DUST OBSCURED GALAXIES, Co.I.	2007–2008
	Keck Laser Guide Star Adaptive Optics Imaging with NIRC2	
	REST-FRAME OPTICAL MORPHOLOGIES OF GALAXIES IN GOODS, Co.I.	2004–2006
	Keck Laser Guide Star Adaptive Optics Imaging with NIRC2	
Teaching Experience	ADJUNCT PROFESSOR, POMONA COLLEGE	2010–2011
	Introductory Physics Laboratory. I collaborated on the design of 20 labs in Mechanics and E&M. My focus was on defining content and process goals. I designed and taught a mini-lecture at the start of each lab	
	VISITING PROFESSOR, CALTECH	2010
	Taught two lectures of graduate level Stellar Structure and Evolution.	
	DIRECTOR, THINK LIKE AN ASTRONOMER	2010
	In an effort to promote science literacy, I have developed a 5-session astronomy short course for the general public. This course introduces major themes in astronomy through inquiry-based activities, and exquisite astronomical images. I taught this course at Glendale Community College.	
	ADJUNCT PROFESSOR, MT SAN ANTONIO COMMUNITY COLLEGE	2009
	Introductory Astronomy Lecture and Lab. I developed and taught the curriculum, for this lecture and lab course, including a semester long Sun tracking lab, and a galaxy morphology inquiry activity.	

	LEAD INSTRUCTOR, THE CENTER FOR ADAPTIVE OPTICS SHORT COURSE	2005
	A one-week course on astronomy, light, and optics to prepare undergraduates for summer research positions in the Center for Adaptive Optics.	
	TEACHING ASSISTANT, UNIVERSITY OF CALIFORNIA SANTA CRUZ	2001–2002
Selected Students Advised	MIN JI KWON HIGH-SCHOOL SUMMER STUDENT	2012
	Photometry of star clusters in M33 observed with Keck Adaptive Optics	
	GAUTAM UPADHYA, CALTECH SUMMER UNDERGRADUATE RESEARCH FELLOW	2011–present
	Tracking the Evolved Stars of M33 with Adaptive Optics Imaging in the Near-IR	
	HANAE INAMI, GRADUATE STUDENT AT THE SPITZER SCIENCE CENTER	2010–present
	Integral field spectroscopy of low redshift Luminous Infrared Galaxies	
	JOHN FORBES, CALTECH UNDERGRADUATE	2009–2010
	Spatially Resolved Stellar Populations of $z = 1$ Luminous Infrared Galaxies	
	ABHIRAM CHIVIKULA, CALTECH SUMMER UNDERGRADUATE RESEARCH FELLOW	2008
	Spectral Energy Distributions of High Redshift Dust-Obscured Galaxies	
Selected Service	ARXIVNOW	2012
	A Mac OSX app I wrote to rapidly peruse, comment on, and archive the daily astro-ph news www.mybigscience.com/arxivnow.html	
	SPACE WEEK	2012
	NASA Spitzer representative at the Los Angeles Science Museum Space Week in honor of the arrival of the space shuttle.	
	SCIENCE ORGANIZING COMMITTEE	2010
	Massive Galaxies III, Tucson, Arizona	
	NSF PANEL MEMBER	2007–2008
	Astronomy and Astrophysics Research Grants	
	DIRECTOR AND LEAD INSTRUCTOR	2006, 2008
	The Keck Adaptive Optics Workshop, University of California Santa Cruz	
	SCIENCE ADVISOR, THE CALIFORNIA MATH AND SCIENCE PROJECT	2006
	Watsonville California School District	
Selected Recent Talks	REFeree	2005–present
	The Astronomical Journal, The Astrophysical Journal, and Publications of the Astronomical Society of the Pacific	
	KECK SCIENCE MEETING, SAN DIAGO CA	September 2012
	“The Local Group Infrared Cluster Survey”	
	GEMINI-N ADAPTIVE OPTICS WORKSHOP	June 2012
	“High Spatial Resolution Studies of Resolved Stellar Populations”	
	CONFERENCE: THROUGH THE INFRARED LOOKING GLASS, PASADENA CA	September 2011
	“The Far-IR Spectral Energy Distributions of $z = 2$ Dust Obscured Galaxies”	
	CONFERENCE: THE STARBUST-AGN CONNECTION: MADRID, SPAIN	September 2011
	“Black Hole Masses and Star Formation Rates of $z = 2$ Dust Obscured Galaxies Revealed with Keck OSIRIS Integral Field Spectroscopy”	
	COLLOQUIUM: UC SAN DIEGO, UCLA, UC IRVINE, COLUMBIA, HARVARD	March–May 2011
	“Infrared Luminosities of AGB and RHeB Stars from HST WFC3: Implications for Measuring Stellar Masses of Galaxies”	
	CONFERENCE: WHY DO GALAXIES CARE ABOUT AGB STARS? VIENNA	September 2010
	“The Contribution of Asymptotic Giant Branch Stars to the Infrared Luminosities	

	of Galaxies: Implications for Measuring Stellar Masses of Galaxies”	
	COLLOQUIUM: UNIVERSITY OF HAWAII	September 2010
	“Dust Obscured Galaxies at $z = 2$ ”	
	COLLOQUIUM: UC SANTA CRUZ	April 2010
	“The Local Group Infrared Cluster Survey”	
	CONFERENCE: DWARF GALAXIES IN THE LOCAL UNIVERSE, SAO, RUSSIA	September 2009
	“Asymptotic Giant Branch Stars as Probes of Star Formation History”	
Selected Collaborations	PANCHROMATIC HUBBLE ANDROMEDA TREASURY (PHAT)	P.I. Dalcanton
	LOCAL GROUP INFRARED CLUSTER SURVEY (LOGICS)	P.I. Melbourne
	NOAO DEEP WIDE FIELD SURVEY (NDWFS)	P.I.s Dey, Januzzi
	GREAT OBSERVATORIES ALL-SKY LIRG SURVEY (GOALS)	P.I.s Sanders, Armus
	CENTER FOR ADAPTIVE OPTICS TREASURY SURVEY (CATS)	P.I.s Larkin, Max, Koo
References	DR. B. T. SOIFER — DIRECTOR, SPITZER SCIENCE CENTER, DEPARTMENT CHAIR, PHYSICS, MATH AND ASTRONOMY California Institute of Technology MC 301-17 1200 E. California Blvd. Pasadena, CA 91125 (626)-395-4241 bts@ipac.caltech.edu	
	DR. CLAIRE MAX — DIRECTOR, CENTER FOR ADAPTIVE OPTICS UCO/Lick Observatories University of California Santa Cruz 1156 High St. Santa Cruz, CA 95064 (831)-459-2049 max@ucolick.org	
	DR. JULIANNE DALCANTON — PROFESSOR Department of Astronomy University of Washington, Box 351580 Seattle WA 98195-1580 (206) 685-2155 jd@astro.washington.edu	
	DR. JAMES LARKIN — PROFESSOR Department of Physics and Astronomy University of California, Los Angeles 430 Portola Plaza Box 951547 Los Angeles, CA. 90095-1547 (310) 825-9470 larkin@astro.ucla.edu	
Publication Summary	FIRST-AUTHOR REFEREED PUBLICATIONS	16
	ADDITIONAL REFEREED PUBLICATIONS	31
	FIRST-AUTHOR CITATION COUNT, NOVEMBER 2012	362
	TOTAL CITATION COUNT, NOVEMBER 2012	1360

**First-
Author
Refereed
Publications**

THE CONTRIBUTION OF THERMALLY-PULSING ASYMPTOTIC GIANT BRANCH AND RED SUPER GIANT STARS TO THE LUMINOSITIES OF THE MAGELLANIC CLOUDS AT $1 - 24 \mu\text{m}$
Melbourne, J. & Boyer, M. 2012. *Astrophysical Journal*, The *Astrophysical Journal*, Volume 764, Issue 1, article id. 30

THE SPECTRAL ENERGY DISTRIBUTIONS AND INFRARED LUMINOSITIES OF DUST OBSCURED GALAXIES FROM HERSCHEL AND SPITZER, NOT YOUR AVERAGE $z = 2$ ULIRGS
Melbourne, J., Soifer, B.T., Desai, V., Pope A., Armus L., Dey, A., Bussmann R.S., Jannuzi, B.T., Alberts, S. 2012. *The Astronomical Journal*, Volume 143, Issue 5, article id. 125

THE CONTRIBUTION OF TP-AGB AND RHEB STARS TO THE NEAR-IR LUMINOSITY OF LOCAL GALAXIES: IMPLICATIONS FOR STELLAR MASS MEASUREMENTS OF HIGH REDSHIFT GALAXIES
Melbourne, J., Williams, B., Dalcanton, J., Rosenfield, P., Girardi, L., Marigo, P., Weisz, D., Dolphin A., Boyer, M., Olsen, K., Skillman E., Seth, A. 2012. *The Astrophysical Journal*, Volume 748, Issue 1, article id. 47

THE BLACK HOLE MASSES AND STAR FORMATION RATES OF $z > 1$ DUST OBSCURED GALAXIES (DOGS): RESULTS FROM KECK OSIRIS INTEGRAL FIELD SPECTROSCOPY
Melbourne, J., Peng, Chien Y, Soifer, B.T., Desai, V., Armus, L., Bussmann, R.S., Dey A., Matthews, K. 2011. *The Astronomical Journal*, Volume 141, Issue 4, pp. 141–152

THE ASYMPTOTIC GIANT BRANCH AND THE TIP OF THE RED GIANT BRANCH AS PROBES OF STAR FORMATION HISTORY: THE NEARBY DWARF IRREGULAR GALAXY KKH 98
Melbourne, J., Williams, B., Dalcanton, J., Ammons, S.M., Max, C., Koo, D.C., Girardi, L., Dolphin, A. 2010. *The Astrophysical Journal*, Volume 712, Issue 1, pp. 469–483

HIGH REDSHIFT DUST OBSCURED GALAXIES, A MORPHOLOGY-SED CONNECTION REVEALED BY KECK ADAPTIVE OPTICS
Melbourne, J., Bussman, S., Brand, K., Desai, V., Armus, L., Dey, A., Jannuzi, B. T., Houck, J. R., Soifer, B. T., Matthews, K. 2008. *The Astronomical Journal*, Volume 137, Issue 6, pp. 4854–4866

MORPHOLOGIES OF HIGH-REDSHIFT DUST-OBSCURED GALAXIES FROM KECK LASER GUIDE STAR ADAPTIVE OPTICS
Melbourne, J., Desai, V., Armus, Lee, Dey, Arjun, Brand, K., Thompson, D., Soifer, B. T., Matthews, K., Jannuzi, B. T., Houck, J. R., 2008. *The Astronomical Journal*, Volume 136, Issue 3, pp. 1110–1117

TRIGGERED OR SELF-REGULATED STAR FORMATION WITHIN INTERMEDIATE REDSHIFT LUMINOUS INFRARED GALAXIES. I. MORPHOLOGIES AND SPECTRAL ENERGY DISTRIBUTIONS
Melbourne, J., Ammons, M., Wright, S. A., Metevier, A., Steinbring, E., Max, C., Koo, D. C., Larkin, J. E., Barczys, M., 2008. *The Astronomical Journal*, Volume 135, Issue 4, pp. 1207–1224

REST-FRAME R-BAND LIGHTCURVE OF A $z \sim 1.3$ SUPERNOVA OBTAINED WITH KECK LASER ADAPTIVE OPTICS
Melbourne, J., Dawson K., Koo D. C., Max C., Larkin J. Wright S., Steinbring E., Barczys, M., Aldering, G., Barbary, K., Doi, M., Fadeyev, V., Goldhaber, G., Hattori, T., Ihara Y., Kashikawa N., Konishi K., Kowalski M., Kuznetsova, N., Lidman, C., Morokuma, T., Perlmutter, S., Rubin D., Schlegel D., Spadafora, A. L., Takanashi, N., Yasuda, N. 2007. *The Astronomical Journal*. Volume. 133, Issue 6, pp. 2709–2715

RADIUS DEPENDENT LUMINOSITY EVOLUTION OF BLUE GALAXIES IN GOODS-N
Melbourne, J., Phillips, A., Harker, J., Novak, G., Koo, D. C., Faber, S. M., 2007. *The Astrophysical Journal*. Volume 660, Issue 1, pp. 81–96

EXPLORING THE OPTICAL AND INFRARED EVOLUTION OF GALAXIES
Melbourne, J., 2006. Ph.D. Thesis, UC Santa Cruz

OPTICAL MORPHOLOGY EVOLUTION OF INFRARED LUMINOUS GALAXIES IN GOODS-N

Melbourne, J., Koo, D. C., Le Floch, E., 2005. *The Astrophysical Journal*. Volume 632, Issue 2, pp. L65–L68

MERGING GALAXIES IN GOODS-S: FIRST EXTRAGALACTIC RESULTS FROM KECK LASER ADAPTIVE OPTICS

Melbourne, J., Wright, S. A., Barczys, M., Bouchez, A. H., Chin, J., van Dam, M. A., Hartman, S., Johansson, E., Koo, D. C., Lafon, R., Larkin, J., Le Mignant, D., Lotz, J., Max, C. E., Pennington, D. M., Stomski, P. J., Summers, D., Wizinowich, P. L., 2005. *The Astrophysical Journal*. Volume 625, Issue 1, pp. L27–L30

MEASURING THE SLOPE OF THE DUST EXTINCTION LAW AND THE POWER SPECTRUM OF DUST CLOUDS USING DIFFERENTIALLY REDDENED GLOBULAR CLUSTERS

Melbourne, J., Guhathakurta, P., 2004. *The Astronomical Journal*. Volume 128, Issue 1, pp. 271–286

METAL ABUNDANCES OF KISS GALAXIES. II. NEBULAR ABUNDANCES OF 12 LOW-LUMINOSITY EMISSION-LINE GALAXIES

Melbourne, J., Phillips, A., Salzer, John J., Gronwall, C., Sarajedini, Vicki L., 2004. *The Astronomical Journal*. Volume 127, Issue 2, pp. 686–703

METAL ABUNDANCES OF KISS GALAXIES. I. COARSE METAL ABUNDANCES AND THE METALLICITY-LUMINOSITY RELATION

Melbourne, J., Salzer, John J., 2002. *The Astronomical Journal*. Volume 123, Issue 5, pp. 2302–2311

CCD PHOTOMETRY OF THE GLOBULAR CLUSTER NGC 4833 AND EXTINCTION NEAR THE GALACTIC PLANE

Melbourne, J., Sarajedini, Ata, Layden, Andrew, Martins, Donald H., 2000. *The Astronomical Journal*. Volume 120, Issue 6, pp. 3127–3138

**Other
Refereed
Publications**

THE PANCHROMATIC HUBBLE ANDROMEDA TREASURY. III. MEASURING AGES AND MASSES OF PARTIALLY RESOLVED STELLAR CLUSTERS

Beerman, Lori C.; Johnson, L. Clifton; Fouesneau, Morgan; Dalcanton, Julianne J.; Weisz, Daniel R.; Seth, Anil C.; Williams, Ben F.; Bell, Eric F.; Bianchi, Luciana C.; Caldwell, Nelson; Dolphin, Andrew E.; Gouliermis, Dimitrios A.; Kalirai, Jason S.; Larsen, Sren S.; Melbourne, Jason L.; Rix, Hans-Walter; Skillman, Evan D. 2012. *The Astrophysical Journal*, Volume 760, Issue 2, article id. 104

SPECTRAL ENERGY DISTRIBUTIONS OF LOCAL LUMINOUS AND ULTRALUMINOUS INFRARED GALAXIES

U, Vivian; Sanders, D. B.; Mazzarella, J. M.; Evans, A. S.; Howell, J. H.; Surace, J. A.; Armus, L.; Iwasawa, K.; Kim, D.-C.; Casey, C. M.; Vavilkin, T.; Dufault, M.; Larson, K. L.; Barnes, J. E.; Chan, B. H. P.; Frayer, D. T.; Haan, S.; Inami, H.; Ishida, C. M.; Kartaltepe, J. S.; Melbourne, J. L.; Petric, A. O. 2012. *The Astrophysical Journal Supplement*, Volume 203, Issue 1, article id. 9

HOT DISKS AND DELAYED BAR FORMATION Sheth, Kartik; Melbourne, Jason; Elmegreen, Debra Meloy; Elmegreen, Bruce G.; Athanassoula, E.; Abraham, Roberto G.; Weiner, Benjamin J. 2012. *The Astrophysical Journal*, Volume 758, Issue 2, article id. 136

THE PANCHROMATIC HUBBLE ANDROMEDA TREASURY

Dalcanton, Julianne J.; Williams, Benjamin F.; Lang, Dustin; Lauer, Tod R.; Kalirai, Jason S.; Seth, Anil C.; Dolphin, Andrew; Rosenfield, Philip; Weisz, Daniel R.; Bell, Eric F.; Bianchi, Luciana C.; Boyer, Martha L.; Caldwell, Nelson; Dong, Hui; Dorman, Claire E.; Gilbert, Karoline M.; Girardi, Lo; Gogarten, Stephanie M.; Gordon, Karl D.; Guhathakurta, Puragra; Hodge, Paul W.; Holtzman, Jon A.; Johnson, L. Clifton; Larsen, Sren S.; Lewis, Alexia; Melbourne, Jason L.; Olsen, Knut A.

G.; Rix, Hans-Walter; Rosema, Keith; Saha, Abhijit; Sarajedini, Ata; Skillman, Evan D.; Stanek, Krzysztof Z. 2012. The Astrophysical Journal Supplement, Volume 200, Issue 2, article id. 18

CO J = 2 – 1 LINE EMISSION IN CLUSTER GALAXIES AT $z \sim 1$: FUELING STAR FORMATION IN DENSE ENVIRONMENTS

Wagg, Jeff; Pope, Alexandra; Alberts, Stacey; Armus, Lee; Brodwin, Mark; Bussmann, Robert S.; Desai, Vandana; Dey, Arjun; Jannuzi, Buell; Le Floc'h, Emeric; Melbourne, Jason; Stern, Daniel. 2012. The Astrophysical Journal, Volume 752, Issue 2, article id. 91

THE HUBBLE SPACE TELESCOPE CLUSTER SUPERNOVA SURVEY. V. IMPROVING THE DARK-ENERGY CONSTRAINTS ABOVE $z > 1$ AND BUILDING AN EARLY-TYPE-HOSTED SUPERNOVA SAMPLE

Suzuki, N.; Rubin, D.; Lidman, C.; Aldering, G.; Amanullah, R.; Barbary, K.; Barrientos, L. F.; Botyanski, J.; Brodwin, M.; Connolly, N.; Dawson, K. S.; Dey, A.; Doi, M.; Donahue, M.; Deustua, S.; Eisenhardt, P.; Ellingson, E.; Faccioli, L.; Fadeyev, V.; Fakhouri, H. K.; Fruchter, A. S.; Gilbank, D. G.; Gladders, M. D.; Goldhaber, G.; Gonzalez, A. H.; Goobar, A.; Gude, A.; Hattori, T.; Hoekstra, H.; Hsiao, E.; Huang, X.; Ihara, Y.; Jee, M. J.; Johnston, D.; Kashikawa, N.; Koester, B.; Konishi, K.; Kowalski, M.; Linder, E. V.; Lubin, L.; Melbourne, J.; Meyers, J.; Morokuma, T.; Munshi, F.; Mullis, C.; Oda, T.; Panagia, N.; Perlmutter, S.; Postman, M.; Pritchard, T.; Rhodes, J.; Ripoché, P.; Rosati, P.; Schlegel, D. J.; Spadafora, A.; Stanford, S. A.; Stanishev, V.; Stern, D.; Strovink, M.; Takanashi, N.; Tokita, K.; Wagner, M.; Wang, L.; Yasuda, N.; Yee, H. K. C.; Supernova Cosmology Project. 2012. The Astrophysical Journal, Volume 746, Issue 1, article id. 85

RESOLVED NEAR-INFRARED STELLAR POPULATIONS IN NEARBY GALAXIES

Dalcanton, Julianne J.; Williams, Benjamin F.; Melbourne, Jason L.; Girardi, Lo; Dolphin, Andy; Rosenfield, Philip A.; Boyer, Martha L.; de Jong, Roelof S.; Gilbert, Karoline; Marigo, Paola; Olsen, Knut; Seth, Anil C.; Skillman, Evan. 2012. The Astrophysical Journal Supplement, Volume 198, Issue 1, article id. 6

THE STAR FORMATION HISTORIES OF $z \sim 2$ DUST-OBSCURED GALAXIES AND SUBMILLIMETER-SELECTED GALAXIES

Bussmann, R. S.; Dey, Arjun; Armus, L.; Brown, M. J. I.; Desai, V.; Gonzalez, A. H.; Jannuzi, B. T.; Melbourne, J.; Soifer, B. T. 2012. The Astrophysical Journal, Volume 744, Issue 2, article id. 150

AGN UNIFICATION AT $z \sim 1$: $u - R$ COLORS AND GRADIENTS IN X-RAY AGN HOSTS

Ammons, S. Mark, Rosario, David J. V., Koo, David C., Dutton, Aaron A., **Melbourne, J.**, Max, Claire E., Mozena, Mark, Kocevski, Dale D., McGrath, Elizabeth J., Bouwens, Rychard J., Magee, Daniel K. 2011. The Astrophysical Journal, Volume 740, Issue 1, pp. 3

THE NUCLEAR STRUCTURE IN NEARBY LUMINOUS INFRARED GALAXIES: HUBBLE SPACE TELESCOPE NICMOS IMAGING OF THE GOALS SAMPLE

Haan, S., Surace, J. A., Armus, L., Evans, A. S., Howell, J. H., Mazzarella, J. M., Kim, D. C., Vavilkin, T., Inami, H., Sanders, D. B., Petric, A., Bridge, C. R., **Melbourne, J.**, Charmandaris, V., Diaz-Santos, T., Murphy, E. J., U, V., Stierwalt, S., Marshall, J. A. 2011. The Astronomical Journal, Volume 141, Issue 3, pp. 100

HUBBLE SPACE TELESCOPE MORPHOLOGIES OF $z \sim 2$ DUST-OBSCURED GALAXIES. II. BUMP SOURCES

Bussmann, R. S., Dey, A., Lotz, J., Armus, L., Brown, M., Desai, V., Eisenhardt, P., Higdon, J., Higdon, S., Jannuzi, B. T., Le Floc'h, E., **Melbourne, J.**, Soifer, B. T., Weedman, D. 2011. The Astrophysical Journal, Volume 733, Issue 1, pp. 21

ACTIVE DISK BUILDING IN A LOCAL H I-MASSIVE LIRG: THE SYNERGY BETWEEN GAS, DUST, AND STAR FORMATION

Cluver, M. E., Jarrett, T. H., Kraan-Korteweg, R. C., Koribalski, B. S., Appleton, P. N., **Melbourne, J.**, Emonts, B., Woudt, P. A. 2010. The Astrophysical Journal, Volume 725, Issue 2, pp. 1550-1562

THE ACS NEARBY GALAXY SURVEY TREASURY. IX. CONSTRAINING ASYMPTOTIC GIANT BRANCH EVOLUTION WITH OLD METAL-POOR GALAXIES

Girardi, Lo, Williams, Benjamin F., Gilbert, Karoline M., Rosenfield, Philip, Dalcanton, Julianne J., Marigo, Paola, Boyer, Martha L., Dolphin, Andrew, Weisz, Daniel R., **Melbourne, J.**, Olsen, Knut A. G., Seth, Anil C., Skillman, Evan. 2010. The Astrophysical Journal, Volume 724, Issue 2, pp. 1030-1043

THE BURIED STARBURST IN THE INTERACTING GALAXY II ZW 096 AS REVEALED BY THE SPITZER SPACE TELESCOPE

Inami, H., Armus, L., Surace, J. A., Mazzarella, J. M., Evans, A. S., Sanders, D. B., Howell, J. H., Petric, A., Vavilkin, T., Iwasawa, K., Haan, S., Murphy, E. J., Stierwalt, S., Appleton, P. N., Barnes, J. E., Bothun, G., Bridge, C. R., Chan, B., Charmandaris, V., Frayer, D. T., Kewley, L. J., Kim, D. C., Lord, S., Madore, B. F., Marshall, J. A., Matsuhara, H., **Melbourne, J.**, Rich, J., Schulz, B., Spoon, H. W. W., Sturm, E., U, V., Veilleux, S., Xu, K. 2010. The Astronomical Journal, Volume 140, Issue 1, pp. 63-74

THE GREAT OBSERVATORIES ALL-SKY LIRG SURVEY: COMPARISON OF ULTRAVIOLET AND FAR-INFRARED PROPERTIES

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