

Curriculum Vitae et Studiorum

Stefano Berta

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Curriculum vitae et studiorum Stefano Berta

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Personal information

First-Name: Stefano
Family Name: Berta
Place of birth: Genova (Italy)
Date of birth: 27/06/1975
Nationality: Italian
E-mail: stefano.bera75(at)gmail.com

Education and Carrer Path:

01/09/2007–
–30/04/2016 **Scientist** position and Post Doctoral fellowship
at Max Planck Institut für Extraterrestrische Physik,
analysing *Herschel* data of extragalactic surveys.

2006 **Post-Doctoral** Scholarship at the Center for
Astrophysics and Space Sciences (CASS), UCSD;
supervisors Prof. H. E. Smith and Dr. C. J. Lonsdale.

01/07/2005–
–30/06/2007 **Post Doctoral** fellowship at Padova
Astronomy Department. Research project on
“Multiwavelength study of *Spitzer*/SWIRE faint galaxies”.

18/03/2005 **PhD degree in Astronomy**, Padova University.
title of PhD thesis: “Multiwavelength analyses of faint
infrared galaxies”; supervisors Prof. A. Franceschini
and Dr. C.J. Lonsdale (IPAC, CalTech).

29/06/2001 **Graduate degree in Astronomy**, Padova
University (Italy). Title of Thesis: “Spectroscopic
study of star forming galaxies in the *Hubble Deep
Fields*”; supervisor Prof. A. Franceschini;
full mark: 110/110

Languages

Italian: mother tongue;
English: fluent;
German: good (reading, writing, speaking);

Observational Experience

I have gained experience at performing imaging and spectroscopic observations with:

| | |
|--------------|---|
| VLT/ISAAC | near-IR spectroscopy of high-redshift star forming galaxies; |
| NTT/SOFI | near-IR spectroscopy of local starbursts and AGNs; near-IR imaging survey of a blank field; |
| Palomar/220" | multislit spectroscopy of intermediate-redshift star forming (SF) galaxies, with the COSMIC camera; |
| Keck/LRIS | multislit spectroscopy of high-redshift SF galaxies; |
| LBT | near-IR and optical, MOS and long-slit spectroscopy of galaxies with the LUCI and MODS instruments. |

Reduction of Astronomical data

I have have a long-time experience in reducing astronomical data of several different kinds:

- a) Mosaic (wide field) optical deep imaging (WFI@2.2m), including detailed study of astrometric corrections and photometric calibration, related to the ESO Large Programme “ESO-SIRTF wide-area Imaging Survey” (ESIS, <http://dipastro.pd.astro.it/esis>);
- b) Wide-area mosaic deep imaging with VIMOS@VLT, including detailed study of distortions, mosaicking problems and fringing, within the ESIS survey;
- c) Optical Mosaic images obtained with the MOSAIC2 instrument at CTIO;
- d) Near-Infrared imaging (SOFI@NTT);
- e) Optical spectroscopy (EFOSC@3.6m) of local ULIRGs;
- f) Near-Infrared spectroscopy (SOFI@NTT, ISAAC@VLT) of low-redshift ULIRGs and high-z IR galaxies;
- g) multi-slit spectroscopy of faint galaxies (FORS1@VLT, FORS2@VLT, EMMI@NTT, COSMIC@Palomar, LRIS@Keck);
- h) optical spectropolarimetry of ULIRGs, obtained through a Wollstone prism (EFOSC@3.6m);

Analysis of Astronomical data

I have have a long-time experience in:

- a) custom SED fitting. I developed a code performing simultaneous 3-components fits, including stars, dust, AGN.
I have written codes to work with Draine & li (2007) models, modified-BB models, and simple template libraries. I have developed UV-to-submm templates (Berta et al 2013a) and I have familiarity with several others.
- b) SED fitting with population synthesis codes, aimed at deriving stellar masses and SFR.
- c) SED fitting: Hyper-z, EAZY, MAGPHYS, GraSil, etc.
- d) photometric redshifts: Hyper-z, EAZY.
- e) source extraction (UV, optical, near-IR, mid-IR), using SExtractor, Starfinder, Daophot, or performing multi-wavelength (UV to mid-IR) PSF-matching (ConvPhot). This includes simulations to derive completeness, reliability, etc.
- f) far-IR source extraction (blind) using Starfinder or Daophot, including simulations.
- g) catalogs building: matching wavelengths, PSFs, apertures, etc.
- h) Building luminosity and mass functions, using the V_{\max} or Bayesian STY methods.

IT knowledge

Operating systems: UNIX, Linux, Windows.

Programming languages: Fortran, Super Mongo, Awk & Shell.

Word processing: Latex, Microsoft Word/Excel/PowerPoint, HTML.

Astronomical Data reduction & analysis packages: IRAF, ECLIPSE, SExtractor, Starfinder, EAZY, Hyper-z, MAGPHYS, custom codes, etc.;

Selected, recent Conferences

- Sep. 2015 “Modeling galaxies through cosmic times” (Cambridge, UK):
oral contribution “Testing our ignorance in measuring dust masses”.
- May 2015 “Gas and dust in Star forming galaxies” conference (Crete, GR):
oral contribution “Dust and Gas in high-z Herschel galaxies”.

- Apr. 2015 “ALMA/Herschel workshop” (ESO, Garching, D):
oral contribution “The ALMA legacy of Herschel deep surveys”.
- Jun. 2013 “A Panchromatic View of Galaxy Evolution” (Pafos ,CY):
invited, oral contribution “Infrared Surveys”.
- Oct. 2011 “EXGAL2011” conference (Pasadena, USA): oral contribution
“The properties of Herschel/PEP star forming galaxies”.
- Sep. 2011 “FIR2011” conference (London, GB):
oral contribution “Herschel/PEP: not only high-z star formation”.
- May 2010 ESLAB, Herschel first results conference (Nordwijk, NL):
oral contribution “PEP: Dissecting the cosmic IR background”.

Professional Refereeing and Observing Panels

- since 2011 Referee for the journal *Nature*
since 2011 Referee for the journal *Astronomy & Astrophysics*
since 2010 Referee for the *Monthly Notices of the Royal Astronomical Society*
since 2008 Referee for the *Astrophysical Journal*
- P91-92 Advisor for the Cosmology Panel of ESO OPC.

Teaching experience and tutoring work

- June 2004, “Laboratory of Image Processing”, 40 hours course for students
2005, 2007 attending the 2nd and 3rd year of Astronomy studies at the
Padova University, financed by the European Social Fund.
- July 2004 – Co-supervisor of Mr. S. Rubele’s *Laurea* thesis on “Deep Galaxy
– June 2005 Surveys in the ELAIS-S1 field”, Padova University.
- Dec. 2002 - Co-supervisor of Mr. P. Repetto’s *Laurea* thesis on “Modeling the
- Oct. 2003 infrared emission of Active Galactic Nuclei”, Padova University.

Other working experiences

- 1999-2002 Tour guide at the historical Astronomical Observatory of Padua.
- 1999 Tour guide during the exhibition “Mostra sulla Luna”
(Moon Exhibition) held in Padua.

Main Roles in Astronomical Jobs

09/2007 – 04/2016 – **Max Planck Inst. f. Extraterrestrische Physik**, working in the Infrared Group (lead by Prof. R. Genzel), in the frame of far-infrared projects, especially the *PACS Evolutionary Probe* extragalactic survey (PEP).

- Analysis of far-infrared (100-500 μm) images from the Herschel Space Telescope;
- source extraction from far-infrared images, using different techniques (aperture, PSF-fitting); characterization of completeness; multi-wavelength match; catalogs-building;
- coordination of the source extraction group of the PEP survey;
- statistical analysis of far-infrared catalogs; number counts; cosmic infrared background (CIB);
- building multi-wavelength catalogs (from the ultraviolet to the far-infrared), using the PSF-matching technique and a multi-wavelength ladder matching;
- analysis of SEDs of galaxies, from the UV to the far-IR, through modeling of stellar and dust emission; derivation of gas masses; gas cosmic volume density;
- study of photometric redshifts
- development of a custom code to reproduce the SEDs of galaxies with stellar, dust and AGN (active galactic nuclei) emission, using bayesian and Monte Carlo techniques;
- preparation of IR observations with 8m class telescopes;
- observations of (distant) galaxies with the VLT and the LBT telescopes.

2006 – **Center for Astrophysics and Space Science (CASS), University of California San Diego (UCSD)**, in the Group of Dr. C. Lonsdale and Prof. H. Smith, working on the *Spitzer Wide-area Infrared Extragalactic Survey*.

- analysis of infrared (3-24 μm) images from the Spitzer Satellite; source extraction and characterization;
- SED fitting with custom codes;
- statistical analysis of large samples of galaxies;
- reduction and analysis of optical spectra of galaxies;
- preparation of spectroscopic observations of galaxies with large telescopes (5-10m class);
- observations (optical and near-infrared spectroscopy) of distant galaxies with the Palomar/COSMIC and the Keck/LRIS telescopes/instruments).

2002 – 2007 Padova Astronomy Department and Astronomical Observatory, in the Group of Prof. A. Franceschini, *studying the properties of infrared galaxies near and far.*

- Reduction of optical and near-infrared spectroscopic data of local and distant star forming galaxies, both single-slit and multi-slit;
- Reduction of optical imaging data, including wide field mosaics obtained with different instruments;
- source extraction from reduced images and creation of catalogs;
- use of software to model the spectral energy distributions (SEDs) and the spectra of galaxies to derive photometric redshifts, stellar masses, star formation rates and other physical parameters, using different approaches (e.g. stellar population synthesis or template models; Bayesian or Adaptive Simulated Annealing algorithms);
- using statistical methods to study the completeness of samples and compute the volume density of their physical parameters;
- development of algorithms and custom codes to perform SED fitting and statistical analyses;
- preparation of spectroscopic observations of galaxies with large telescopes (4-8m class);
- observations (optical and near-infrared spectroscopy and imaging) of distant galaxies with the NTT and VLT telescopes.

Full list of refereed Publications of Stefano Berta

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Summary

- 145 Publications on Refereed Journals (12 as first author);
- 47 Non-Refereed Publications (as from ADS), incl. catalogs;
- total citations 7955;
- h index 50.

As first author

[143] *Measures of galaxy dust and gas mass with Herschel photometry and prospects for ALMA.* **Berta, S.**, et al., 2015, *A&A*, **587A**, 73.

[97] *Molecular gas mass functions of normal star-forming galaxies since $z \sim 3$.* **Berta, S.** et al., 2013, *A&A*, **555**, L8.

[92] *Panchromatic spectral energy distributions of Herschel sources.* **Berta, S.** et al., 2013, *A&A*, **551**, A100.

[59] *Building the cosmic infrared background brick by brick with Herschel/PEP.* **Berta, S.**, Magnelli, B.; Nordon, R., et al., 2011, *A&A*, **532**, A49.

[49] *Dissecting the cosmic infra-red background with Herschel/PEP.* **Berta, S.**, Magnelli, B., Lutz, D. et al., 2010, *A&A*, **518**, L30

[32] *The ESO-Spitzer Imaging extragalactic Survey (ESIS) II: VIMOS I, z wide field deep imaging of ELAIS-S1 and selection of distant massive galaxies.* **Berta, S.** et al., *A&A*, **488**, 533.

[23] *The contribution of very massive high-redshift SWIRE galaxies to the stellar mass function.* **Berta, S.** et al., 2007, *A&A*, **476**, 151.

[21] *Keck spectroscopy of $z = 1 - 3$ ULIRGs from the Spitzer SWIRE survey.* **Berta, S.** et al., 2007, *A&A*, **467**, 565.

[17] *The ESO-Spitzer Imaging extragalactic Survey (ESIS) I: WFI B, V, R deep observations of Elais-S1 and comparison to Spitzer and GALEX data.* **Berta S.** et al., 2006, *A&A*, **451**, 881.

[16] *Multiwavelength Analyses of Faint Infrared Galaxies.* **Berta, S.**, 2006, Dissertation Summary, *PASP*, **118**, 754.

[6] *Photometric estimate of stellar masses in high redshift galaxies.* **Berta, S.**, Fritz, J., Franceschini, A., Bressan, A. & Lonsdale, C.J., 2004, *A&A*, **418**, 913.

[2] *Spatially-resolved spectrophotometric analysis and modeling of the Superantennae.* **Berta, S.**, Fritz, J., Franceschini, A., Bressan, A. & Pernechele, C., 2003, *A&A*, **403**, 119.

All refereed

- [145] *Tracing black hole accretion with SED decomposition and IR lines: from local galaxies to the high- z Universe.* Gruppioni, C., **Berta, S.**, et al., 2016, *MNRAS*, **458**, 4297.
- [144] *A fast ionised wind in a Star Forming-Quasar system at $z\sim 1.5$ resolved through Adaptive Optics assisted near-infrared data.* Brusa, M., et al., 2016, *A&A*, **588A**, 58.
- [143] *Measures of galaxy dust and gas mass with Herschel photometry and prospects for ALMA.* **Berta, S.**, et al., 2015, *A&A*, **587A**, 73.
- [142] *The far-infrared emitting region in local galaxies and QSOs: Size and scaling relations.* Lutz, D., et al., 2015, *A&A*, **591A**, 136.
- [141] *Dust attenuation in $z\sim 1$ galaxies from Herschel and 3D-HST $H\alpha$ measurements.* Puglisi, A., et al., 2015, *A & A*, **586A**, 83.
- [140] *The PEP survey: evidence for intense star-forming activity in the majority of radio-selected AGN at $z\geq 1$.* Magliocchetti, M., et al., 2016, *MNRAS*, **456**, 431.
- [139] *Non-linearity and environmental dependence of the star-forming galaxies main sequence.* Erfanianfar, G., et al., 2016, *MNRAS*, **455**, 2839.
- [138] *SINFONI spectra of heavily obscured AGNs in COSMOS: evidence of outflows in a MIR/O target at $z\sim 2.5$.* Perna, M., et al., 2015, *A&A*, **583**, 72.
- [137] *Star formation properties of sub-mJy radio sources.* Bonzini, M., et al., 2015, *MNRAS*, **453**, 1079.
- [136] *A higher efficiency of converting gas to stars push galaxies at $z\sim 1.6$ well above the star-forming main sequence.* Silverman, J. D., et al., 2015, *ApJL*, **812L**, 23.
- [135] *Massive stars formed in atomic hydrogen reservoirs: HI observations of gamma-ray burst host galaxies.* Michalowski, M. J., et al., 2015, *A&A*, **582A**, 78.
- [134] *The composite nature of Dust-Obscured Galaxies (DOGs) at $z\sim 2-3$ in the COSMOS field - I. A far-infrared view.* Riguccini, L., et al., 2015, *MNRAS*, **452**, 470.
- [133] *SXDF-ALMA 1.5 arcmin² deep survey. A compact dusty star-forming galaxy at $z=2.5$.* Tadaki, K., et al., 2015, *ApJL*, **811L**, 3.
- [132] *Star formation in Herschel's Monsters versus semi-analytic models.* Gruppioni, C., et al., 2015, *MNRAS*, **451**, 3419.
- [131] *The role of massive halos in the Star Formation History of the Universe.* Popesso, P., et al., 2014, *A&A*, **579A**, 132.
- [130] *The most obscured AGN in the COSMOS field.* Lanzuisi, G., 2015, *A&A*, **578A**, 120.
- [129] *Star formation and quenching among the most massive galaxies at $z\sim 1.7$.* Mancini, C., et al., 2015, *MNRAS*, **450**, 763.

- [128] *Mapping the average AGN accretion rate in the SFR- M^* plane for Herschel-selected galaxies at $0 < z \leq 2.5$.* Delvecchio, I., et al., 2015, *MNRAS*, **449**, 373.
- [127] *Combined CO and Dust Scaling Relations of Depletion Time and Molecular Gas Fractions with Cosmic Time, Specific Star-formation Rate, and Stellar Mass.* Genzel, R., et al., 2015, *ApJ*, **800**, 20.
- [126] *The evolution of galaxy star formation activity in massive halos.* Popesso, P., et al., 2015, *A&A*, **574A**, 105.
- [125] *Compton Thick AGN in the XMM-COSMOS survey.* Lanzuisi, G., 2015, *A&A*, **573A**, 137.
- [124] *The host galaxies of X-ray selected Active Galactic Nuclei to $z=2.5$: Structure, star-formation and their relationships from CANDELS and Herschel/PACS.* Rosario, D., et al., 2015, *A&A*, **573A**, 85.
- [123] *The far-infrared/radio correlation and radio spectral index of galaxies in the SFR- M^* plane up to $z \sim 2$.* Magnelli, B., et al., 2015, *A&A*, **573A**, 45.
- [122] *The evolution of star formation activity in galaxy groups.* Erfanianfar, G., et al., 2014, *MNRAS*, **445**, 2725.
- [121] *Evidence for Wide-Spread AGN Driven Outflows in the Most Massive $z \sim 1 - 2$ Star Forming Galaxies.* Genzel, R., et al., 2014, *ApJ*, **796**, 7.
- [120] *Large-scale clustering measurements with photometric redshifts: comparing the dark matter haloes of X-ray AGN, star-forming and passive galaxies at $z \sim 1$.* Georgakakis, A., et al. 2014, *MNRAS*, **443**, 3327.
- [119] *A multiwavelength consensus on the main sequence of star-forming galaxies at $z \sim 2$.* Rodighiero, G., et al., 2014, *MNRAS*, **443**, 19.
- [118] *The PEP survey: infrared properties of radio-selected AGN.* Magliocchetti, M., et al., 2014, *MNRAS*, **442**, 682.
- [117] *Herschel far-IR counterparts of SDSS galaxies: analysis of commonly used star formation rate estimates.* Dominguez Sanchez, H., et al., 2014, *MNRAS*, **441**, 2.
- [116] *New light on gamma-ray burst host galaxies with Herschel.* Hunt, L. K., et al., 2014, *A&A*, **565**, A112.
- [115] *Tracing the cosmic growth of supermassive black holes to $z \sim 3$ with Herschel.* Delvecchio, I., et al., 2014, *MNRAS*, **439**, 2736.
- [114] *The incidence of obscuration in active galactic nuclei.* Merloni, A., et al., 2014, *MNRAS*, **437**, 3550.
- [113] *Submillimeter Galaxies as Progenitors of Compact Quiescent Galaxies.* Toft, S., et al., 2014, *ApJ*, **782**, 68.
- [112] *Spatially-resolved dust properties of the GRB 980425 host galaxy.* Michalowski, M. J., et al., 2014, *A&A*, **562**, A70.
- [111] *The evolution of the dust and gas content in galaxies.* Santini, P., et al., 2014, *A&A*, **562**, A30.

- [110] *Reversal or no reversal: the evolution of the star formation rate-density relation up to $z \sim 1.6$.* Ziparo, F., et al., 2014, *MNRAS*, **437**, 458.
- [109] *The evolution of the dust temperatures of galaxies in the SFR- M^* plane up to $z \sim 2$.* Mag-nelli, B., et al., 2014, *A&A*, **561**, A86.
- [108] *Serendipitous detection of an overdensity of Herschel-SPIRE 250 μm sources south of MRC 1138-26.* Valtchanov, I., et al., 2013, *MNRAS*, **436**, 2505.
- [107] *The mean star-forming properties of QSO host galaxies.* Rosario, D., et al., 2013, *A&A*, **560**, A72.
- [106] *Validation of the Equilibrium Model for Galaxy Evolution to $z \sim 3$ through Molecular Gas and Dust Observations of Lensed Star-forming Galaxies.* Saintonge, A., et al., 2013, *ApJ*, **778**, 2.
- [105] *Lyman Break and ultraviolet-selected galaxies at $z \sim 1$ - II. PACS 100 μm /160 μm FIR detections.* Oteo, I., et al., 2013, *MNRAS*, **435**, 158.
- [104] *Herschel reveals the obscured star formation in HiZELS H α 3b1 emitters at $z = 1.47$.* Ibar, E., et al., 2013, *MNRAS*, **434**, 3218.
- [103] *The lack of star formation gradients in galaxy groups up to $z \sim 1.6$.* Ziparo, A., et al., 2013, *MNRAS*, **434**, 3089.
- [102] *Cosmological model dependence of the galaxy luminosity function: far-infrared results in the Lematre-Tolman-Bondi model.* Iribarrem, A., et al., 2013, *A&A*, **558**, A15.
- [101] *Dust-obscured star formation in the outskirts of XMMU J2235.3-2557, a massive galaxy cluster at $z = 1.4$.* Santos, J S., et al., 2013, *MNRAS*, **433**, 1287.
- [100] *Photometric Redshifts of Submillimeter Galaxies.* Chakrabarti, S. et al., 2013, *ApJ*, **773**, 113.
- [99] *The Herschel-PEP survey: evidence for downsizing in the hosts of dusty star-forming systems.* Magliocchetti, M. et al., 2013, *MNRAS*, **433**, 127.
- [98] *Nuclear Activity is More Prevalent in Star-forming Galaxies.* Rosario, D. et al., 2013, *ApJ*, **771**, 63.
- [97] *Molecular gas mass functions of normal star-forming galaxies since $z \sim 3$.* Berta, S. et al., 2013, *A&A*, **555**, L8.
- [96] *The Herschel PEP/HerMES luminosity function - I. Probing the evolution of PACS selected Galaxies to $z \simeq 4$.* Gruppioni, C., et al., 2013, *MNRAS*, **432**, 23.
- [95] *Herschel PEP/HerMES: the redshift evolution ($0 \leq z \leq 4$) of dust attenuation and of the total (UV+IR) star formation rate density.* Burgarella, D., et al., 2013, *A&A*, **554**, A70.
- [94] *The Herschel census of infrared SEDs through cosmic time.* Symeonidis, M., Vaccari, M., Berta, S. et al., 2013, *MNRAS*, **431**, 2317.
- [93] *The deepest Herschel-PACS far-infrared survey: number counts and infrared luminosity functions from combined PEP/GOODS-H observations.* Magnelli, B., Popesso, P., Berta, S. et al., 2013, *A&A*, **553**, A132.

- [92] *Panchromatic spectral energy distributions of Herschel sources.* Berta, S. et al., 2013, *A&A*, **551**, A100.
- [91] *The Far-infrared, UV, and Molecular Gas Relation in Galaxies up to $z = 2.5$.* Nordon, R. et al., 2013, *ApJ*, **762**, 125.
- [90] *The Complex Physics of Dusty Star-forming Galaxies at High Redshifts as Revealed by Herschel and Spitzer.* Lo Faro, B. et al., 2013, *ApJ*, **762**, 108.
- [89] *GMASS ultra-deep spectroscopy of galaxies at $z \sim 2$ - VII. Sample selection and spectroscopy.* Kurk, J. et al., 2013, *A&A*, **549**, A63.
- [88] *Accreting SMBHs in the COSMOS field and the connection to their host galaxies.* Bongiorno, A. et al., 2012, *MNRAS*, **427**, 310.
- [87] *A Redshift Survey of Herschel Far-Infrared Selected Starbursts and Implications for Obscured Star Formation.* Casey, S.M., et al., 2012, *ApJ*, **761**, 140.
- [86] *A Population of $z > 2$ Far-Infrared Herschel-SPIRE selected Starbursts.* Casey, S.M., et al., 2012, *ApJ*, **761**, 139.
- [85] *Dust temperature and CO-to-H₂ conversion factor variations in the SFR- M^* plane.* Mag-nelli, B. et al., 2012, *A&A*, **548**, A22.
- [84] *The effect of the high-pass filter data reduction technique on the Herschel PACS Photometer PSF and noise.* Popesso, S. et al., *arXiv/1211.4257*.
- [83] *Cosmic Evolution of Star-Formation Enhancement in Close Major-Merger Galaxy Pairs Since $z = 1$.* Xu, C.K. et al., 2012, *ApJ*, **760**, 72.
- [82] *Comparison of star formation rates from H α and infrared luminosity as seen by Herschel.* Dominguez-Sanchez, H. et al., 2012, *MNRAS*, **426**, 330.
- [81] *Deep observations of CO line emission from star-forming galaxies in a cluster candidate at $z=1.5$.* Aravena, M., et al., 2012, *MNRAS*, **426**, 258.
- [80] *Bolometric luminosities and Eddington ratios of X-ray selected active galactic nuclei in the XMM-COSMOS survey.* Lusso, E. et al., 2012, *MNRAS*, **425**, 623.
- [79] *Herschel observations of a $z \sim 2$ stellar mass selected galaxy sample drawn from the GOODS NICMOS Survey.* Hilton, M. et al., 2012, *MNRAS*, **425**, 540.
- [78] *The mean star formation rate of X-ray selected active galaxies and its evolution from $z \sim 2.5$: results from PEP-Herschel.* Rosario, D. et al., 2012, *A&A*, **545**, A45.
- [77] *Star Formation in LINER Host Galaxies at $z \sim 0.3$.* Tommasin, S. et al., 2012, *ApJ*, **753**, 155.
- [76] *The AGN content in luminous infrared galaxies at $z \sim 2$ from a global SED analysis including Herschel data.* Pozzi, F. et al., 2012, *MNRAS*, **423**, 1909.
- [75] *Physical Properties of Ly α Emitters at $z \sim 0.3$ from UV-to-FIR Measurements.* Oteo, I. et al., 2012, *ApJ*, **751**, 139.
- [74] *Clustering of Star-forming Galaxies Detected in Mid-infrared with the Spitzer Wide-area Survey.* Starikova, S. et al., 2012, *ApJ*, **751**, 126.

- [73] *HerMES: deep number counts at 250 μm , 350 μm and 500 μm in the COSMOS and GOODS-N fields and the build-up of the cosmic infrared background.* Bethermin, M. et al., 2012, *A&A*, **542**, A58.
- [72] *Herschel-PACS far-infrared detections of Lyman- α emitters at $2.0 \leq z \leq 3.5$.* Oteo, I. et al., 2012, *A&A*, **541**, A65.
- [71] *Enhanced star formation rates in AGN hosts with respect to inactive galaxies from PEP-Herschel observations.* Santini, P. et al., 2012, *A&A*, **540**, A109.
- [70] *A Herschel view of the far-infrared properties of submillimetre galaxies.* Magnelli, B., et al., 2012, *A&A*, **539**, A155.
- [69] *GMASS ultra-deep spectroscopy of galaxies at $z \sim 2$. VI. Star formation, extinction, and gas outflows from UV spectra.* Talia, M., et al. 2012, *A&A*, **539**, A61.
- [68] *The Impact of Evolving Infrared Spectral Energy Distributions of Galaxies on Star Formation Rate Estimates.* Nordon, R., Lutz, D., Genzel, R., **Berta, S.**, et al., 2012, *ApJ*, **745**, 182.
- [67] *The evolution of the star formation activity per halo mass up to redshift ~ 1.6 as seen by Herschel.* Popesso, P. et al., 2012, *A&A*, **537**, A58.
- [66] *Galaxy Structure and Mode of Star Formation in the SFR-Mass Plane from $z \sim 2.5$ to $z \sim 0.1$.* Wuyts, S. et al., 2011, *ApJ*, **742**, 96.
- [65] *The Lesser Role of Starbursts in Star Formation at $z = 2$.* Rodighiero et al., 2011, *ApJL*, **739**, 40.
- [64] *The PEP survey: clustering of infrared-selected galaxies and structure formation at $z \sim 2$ in GOODS-South.* Magliocchetti, M. et al., 2011, *MNRAS*, **416**, 1105.
- [63] *On Star Formation Rates and Star Formation Histories of Galaxies Out to $z \sim 3$.* Wuyts, S. et al., 2011, *ApJ*, **738**, 106.
- [62] *Disk, merger, or outflow? Molecular gas kinematics in two powerful obscured QSOs at $z \geq 3.4$.* Polletta, M., et al., 2011, *A&A*, **533**, A20.
- [61] *The effect of environment on star forming galaxies at redshift. I. First insight from PACS.* Popesso, P. et al., 2011, *A&A*, **532**, A145.
- [60] *PACS Evolutionary Probe (PEP) - A Herschel key program.* Lutz, D. et al., 2011, *A&A*, **532**, A90.
- [59] *Building the cosmic infrared background brick by brick with Herschel/PEP.* **Berta, S.**, Magnelli, B.; Nordon, R., et al., 2011, *A&A*, **532**, A49.
- [58] *FIR Measurements of Ly α emitters at $z \leq 1.0$: Dust Attenuation from PACS-Herschel.* Oteo, I. et al, 2011, *ApJL*, **735**, L15.
- [57] *The Redshift and Nature of AzTEC/COSMOS 1: A Starburst Galaxy at $z = 4.6$.* Smolčić, V. et al., 2011, *ApJL*, **731**, L27.
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