

# Curriculum Vitae & List of Publications

Mattia Vaccari

`mattia@mattiovaccari.net` <http://www.mattiovaccari.net>

**Last Updated on 10 March 2017**

## Summary

I have got a keen interest and an extensive experience in the exploitation of large-area multi-wavelength extragalactic surveys aimed at giving extragalactic astrophysics and observational cosmology a sound statistical basis. I have thus developed a wide-ranging expertise in astronomical data reduction, source extraction, multi-wavelength identification, physical characterization and statistical studies of (far-)infrared and (sub-)millimeter extragalactic populations. I have also worked on software development and on observation planning and science analysis for space astronomy missions, on the numerical modeling of astronomical instrumentation and sky properties, on the evaluation of the expected instrumental performance and science rationale for future observatories and on the laboratory testing and in-orbit commissioning of space instrumentation.

I have been involved in the development of one of the most powerful methods for ISO data reduction and analysis, and I led major ISO and Spitzer data reduction and analysis programs, including the production of the largest ISO 15 micron and Spitzer 70 and 160 micron extragalactic catalogs produced to date by any individual project carried out by these missions at these wavelengths. I have contributed to the definition and development of the Herschel/SPIRE ground segment, with a particular focus on the observation planning, data processing and data archive system. I am an expert in multi-wavelength extragalactic surveys, source identification, SED fitting and related VO tools, and I have led the production of the largest Spitzer-selected multi-wavelength extragalactic catalogs available to date.

I have long been involved in international scientific consortia, coordinating working groups of both a scientific and technical nature, organizing and managing meetings, carrying out a variety of management tasks and extensively engaging in student supervision, and I have thus developed strong links with the academic, scientific and instrumental community. I am genuinely attracted to challenges and projects requiring a wide range of expertise. I often have strong opinions but appreciate the need to come to a mutually satisfactory agreement, and I enjoy working as part of a focused team as well as taking the lead on specific issues.

## Vita & Education & Employment

I was born in Montebelluna, Italy, on 23 January 1975. I am an Italian Citizen.

I hold a Diploma of Scientific Studies from the "Primo Levi" Scientific High School of Montebelluna (July 1993, 60/60), an MSc in Physics from the University of Padova (17 July 2000, 110/110 *cum laude*) and a PhD in Space Science and Technology from the University of Padova (21 May 2004).

From November 2003 to September 2005 I have been employed as a SPIRE ICC Scientist & Herschel Post-Doctoral Fellow within the Astrophysics Group at Imperial College London.

From September 2005 to November 2011 I have been employed as a Herschel Post-Doctoral Fellow within the Department of Astronomy at the University of Padova.

From November 2011 to date I have been employed as a Senior Research Fellow within the Astrophysics Group at the University of the Western Cape in Cape Town, South Africa, funded by the SKA-SA and HELP projects.

## Research & Work Experience

My research activity has mostly been concerned with multi-wavelength observational studies of long-wavelength extragalactic populations detected by ISO, SCUBA, Spitzer and Herschel, whose number counts, luminosity functions, clustering and spectral energy distributions have been used to probe galaxy formation and evolution through cosmic time. I have thus been involved in a number of projects involving data reduction and analysis at infrared (loosely defined as 1-1000 micron) wavelengths as well as science planning and simulations for space missions operating at these wavelengths. I have also worked on several space-based instrumentation and related software development projects, both in their planning and proper development phases. Most of my work has been carried out within a number of large survey projects undertaken by international consortia, where I have developed a strong interest in techniques for the automated reduction and statistical analysis of large datasets on one hand and in software development and science planning for space missions on the other.

More specifically, during my MSc studies at the University of Padova I have worked on simulations of galaxy observations with ESA's GAIA satellite, in order to exploit GAIA all-sky survey capabilities to perform galaxy formation and evolution and large-scale structure studies in the Local Universe. This included the careful simulation of different instrumental effects and the implementation of various image reconstruction techniques and was carried out in close collaboration with the GAIA Science Team, particularly with my supervisors in Copenhagen (where I spent 10 months working on this project), Dr Erik Høg, and in Padova, Professor Pierluigi Bernacca. This study has brought to the inclusion of galaxy observations into the baseline GAIA science plan and has also allowed me to join the Photometry and Imaging Working Group established by ESA for the GAIA mission.

During my PhD studies at the University of Padova (November 2000 to October 2003), which I carried out under the supervision of Professor Alberto Franceschini, I have worked on two lines of research within the realm of space extragalactic long-wavelength astronomy. The former involved the development of tools for ISOCAM and ISOPHOT data reduction and analysis, now jointly known as LARI Method, involving new techniques for cosmic ray impact detection, mathematical modeling of detectors' behavior and mapping/projection. The method is particularly suited for the reliable detection of faint sources in ISO noisy raster maps, and was first tested and employed in the data reduction of ELAIS, the largest open-time project undertaken by ISO, producing the largest extragalactic catalog based on ISO data and providing substantial improvements with respect to other methods as far as reliability, completeness, astrometric and photometric accuracy are concerned. The extreme reliability of the catalog has in time allowed a wide variety of projects involving multi-wavelength identification and follow-up observations, including the largest Spitzer GO1 observing program, aimed at IRS observations of 15 micron-selected high-redshift starbursts and AGNs. Within the latter line of research I carried out numerical simulations of the performance to be expected from future space infrared instrumentation, and applied them to Webb's MIRI and to Herschel's PACS and SPIRE imagers contributing to the science planning of extragalactic large-area surveys to be carried out with such instrumentation.

Following the completion of my PhD I moved to Imperial College London (November 2003 to September 2005) as a Research Fellow working with Professor Michael Rowan-Robinson and

Dr David Clements. In London I have continued my work on multi-wavelength identification and follow-up studies of ISO sources while getting involved with the ideal successor of the ELAIS ISO project, i.e. the SWIRE survey. The largest (850 hr) portion of the Spitzer Legacy Science Program, SWIRE observed a total of 50 square degrees in all Spitzer photometric channels within six fields where extensive multi-wavelength coverage is available, producing a catalog of about 2 million infrared galaxies. In this context, I have been collaborating to the catalog validation and leading the characterization of the survey selection function, which has allowed the whole team to work on number counts, luminosity functions and clustering studies on statistically well-defined samples of sources selected at various wavelengths and thus make full use of the photometric redshift information that is available for a substantial fraction of detected sources. In particular, I have led the production of catalogs and the determination of source counts from SWIRE 70 and 160 micron data, which provided the largest extragalactic catalog at these wavelengths from any single Spitzer project.

While in London, however, a substantial part of my time has been spent on observation planning, software development and ground testing/calibration for the SPIRE camera that has flown on board ESA's Herschel satellite. As a major partner in the SPIRE consortium, Imperial College London has contributed to a vast array of key preparatory activities such as: the software development effort on the SPIRE-specific data reduction pipeline, where I was a lead developer; the users feedback process on the Herschel-wide (i.e cross-instrument) Data Processing system, which saw me as SPIRE representative within the Herschel Data Processing Users Group established by ESA; the definition of SPIRE observing modes and their implementation in the Herschel observing proposal handling tool (HSPOT) developed by ESA, where I co-led the SPIRE Observation Planning Team with responsibility for photometric mapping observations; instrument ground testing, where I contributed through the integration of the instrument simulator with the data reduction pipeline, the specification of the actual tests and the analysis of test data; the planning of the SPIRE GT Data Releases, where I worked on the integration of SPIRE and Herschel data products within the architecture of the Virtual Observatory. In this context, I have been representing SPIRE in a number of Herschel-wide bodies established by ESA. This work has gained me access to the teams that are planning guaranteed-and open-time Key Programs with PACS and SPIRE, including HerMES and H-ATLAS, the largest Herschel guaranteed-and open-time Key Programs, respectively. Partly as a useful complement to my SWIRE involvement and partly to pave the way to my Herschel work I have also worked on some of the most ambitious ground-based extragalactic SMM survey projects. I have extensively observed with SCUBA at JCMT for SHADES and worked on the identification, photometric redshift determination and SED template fitting of SHADES sources by means of SWIRE data and I have become part of the consortium in charge of the JCMT Legacy Survey with HARP and SCUBA2, and in particular of the SCUBA2 Cosmology Legacy Survey.

Having gone back to Padova (October 2005 to October 2011) as a Research Fellow working with Professor Alberto Franceschini, I have continued my work on Spitzer Cold surveys and carried out early work on Spitzer Warm and Herschel surveys. On the Spitzer Cold side, my work on SWIRE data as well as on archival data provided by COSMOS and GOODS focused on the properties of galaxies detected at MIPS wavelengths and assembling a large spectro-photometric database aimed at their photometric redshift determination and physical characterization. In so doing, I have developed, refined and automated powerful in-house algorithms for maximum-

likelihood source identification across multi-wavelength catalogs, photometric redshift estimates and the calculation of luminosity functions and two-point correlation functions, which have been employed in a number of science projects in collaboration with colleagues and students, leading to three MSc projects and three PhD projects under my supervision. This has also laid the foundations for the Spitzer Data Fusion, the largest Spitzer-selected multi-wavelength extragalactic catalog available to date, covering 65 square degrees within the SWIRE, Bootes and XFLS fields, selected at IRAC wavelengths but systematically incorporating the latest public data from the FUV (GALEX) to the FIR (MIPS), including SDSS, CFHTLS, INTWFS, WFI, VST, UKIDSS, VISTA, allowing to perform synthetic aperture matching of the photometry and thus enabling improved photometric redshift, star formation rate and stellar mass estimates.

While in Padova, I have played a leading role in planning and detailing the observations for the ongoing Spitzer Extragalactic Representative Volume Survey (SERVS) and Herschel Multi-Tiered Extragalactic Survey (HerMES) projects, employing 1400 and 900 hours of Spitzer Warm and Herschel time respectively, and I have been assembling the existing ancillary data from the FUV to the FIR required to timely and effectively exploit Spitzer and Herschel data, developing a flexible cross-correlation framework to allow an effective and quick ingestion of new Spitzer and Herschel observations into a multi-wavelength database. Such a database, now also known as 'data fusion' within the SERVS and HerMES consortia, has been extremely useful to fully and timely exploit early Spitzer Warm and Herschel data and provides a powerful platform for the exploitation of surveys which will become available in these fields in the near future such as the completion of UKIDSS, VST and VISTA public surveys, the VOICE VST GT survey and radio surveys with LOFAR, ASKAP and MeerKAT. The data fusion will allow us to consistently compute accurate photometric redshifts, stellar masses and star formation rates for both NIR, FIR and radio-selected samples, help us to reconcile estimates of stellar masses and star formation rates for sources at  $1 < z < 5$  and thus construct a self-consistent picture of stellar mass build-up across most of Cosmic Time.

From 2007 onwards I have been involved in a number of studies for the science planning of future FIR and (S)MM instrumentation and related survey projects. Using our state-of-the-art models for the numbers and properties of long-wavelength extragalactic populations developed to reproduce available observations by ISO, Spitzer and SCUBA, I have carried out extensive simulations of the number counts, redshift distributions and luminosity functions as they would be obtained by Herschel, Planck, SCUBA2, LMT as well as by the current concepts for SPICA, FIRI, Millimetron, the Antarctic SMM Observatory (ASO) under study for deployment at the French-Italian Concordia (Dome C) Antarctic station and the Spectroscopic Active Galaxies and Cluster Explorer (SAGACE) satellite recently approved for a Phase-A study by ASI. In particular, I was part of the team in charge of ESA's Cosmic Vision 2008-2009 Phase-A study for the SAFARI (SPICA Far-Infrared Instrument) instrument to be flown on the SPICA (Space Infrared telescope for Cosmology and Astrophysics) JAXA satellite, I have actively participated into the ARENA (Antarctic Research European Network for Astrophysics) network funded by the European Commission to study the opportunity for a large astronomical facility to be operated in Antarctica, and I was part of the Euclid Science Team's successful bid to ESA to develop the Euclid space mission. I have managed a number of ESA/ASI contracts awarded to his group to develop some of the above projects, and in particular the Padova contribution to the PACS and SPIRE ICCs, supervising their progress and reporting to ESA/ASI.

From 2010 onwards I have been leading the 200-hr 5-yr VST GT VOICE Survey, which exploits the exquisite image and site quality provided by VST and Paranal to provide deep ugr<sub>i</sub> optical data crucial to estimate photometric redshifts, dust attenuation, star formation rates and stellar masses for millions of sources over  $4 \times 4 \text{ deg}^2$  of the CDFS and ES1 fields. The combination of VST-VOICE data with observations by VISTA/VIDEO, Spitzer/SERVS-SWIRE, Herschel/HerMES and ATCA/ATLAS will provide the most detailed multi-wavelength picture of galaxy formation and evolution processes over  $4 \text{ deg}^2$ -size areas, probing larger cosmic volumes and a wider range of environments than CANDELS, GOODS, UDS and COSMOS. The assembly of stellar mass over the crucial  $1 < z < 5$  redshift range, as well as the evolution of the Star Formation Rate Function and of the Black Hole Accretion Rate Function, will be studied as a function of redshift and environment. Observational results will be compared against the predictions from state-of-the-art theoretical models, shedding light on where current models should be improved upon to suitably describe star formation and black hole accretion processes. Survey observations started in October 2011 and are due for completion in March 2016, are combining a cadenced supernova search and AGN variability survey with a deep multi-band imaging survey, paving the way to DES, LSST and other future time-domain astronomy projects.

From November 2011 to date I have been employed as a Senior Research Fellow at the University of the Western Cape in Cape Town, where I have been working with Professor Matt Jarvis and Professor Russ Taylor on multi-wavelength galaxy formation and evolution studies and planning for ASKAP/MeerKAT/SKA extragalactic surveys. My main science goal is to improve existing constraints on the evolution of Infrared and Radio source populations, of the Cosmic Star Formation Rate Function and of the Far-Infrared/Radio Correlation at  $0 < z < 5$ , combining deep and wide multi-wavelength datasets for source identification and characterization through SED fitting, using a combination of phenomenological templates and physical SED models for the estimate of photometric redshifts and physical properties respectively. My main contribution to the planning of the ASKAP, LOFAR and MeerKAT extragalactic surveys in the context of other SKA pathfinders and on the way to the SKA lies in providing matched multi-wavelength ancillary data required to better detect and characterize sources detected in radio line and continuum surveys such as ASKAP's EMU, LOFAR's Key Survey Project and MeerKAT's LADUMA and MIGHTEE. In particular, I am part of the MIGHTEE executive where I lead the multi-wavelength data and cross-identification Working Group and as a member of the SKA Continuum Surveys Working Group I am involved in the definition of the SKA Key Science Projects. I also lead the South African participation within a 3-year project to encourage collaboration between Italy and South Africa in radio astronomy and within the 4-year "BigSkyEarth" EU COST action to leverage Big Data techniques in Astrophysics and Earth Observations. SALT observing programs I am involved with include preparatory spectroscopy for LADUMA and MIGHTEE sources as well as 3-year legacy spectroscopic follow-up project of Herschel-selected strong gravitational lenses. I have also participated to the development of a science case for a wide-field multi-object spectrograph facility to be developed and based in South Africa. In this context, since 2014 I have been working on HELP, an EC-funded project (2014-2017) building upon the Data Fusion to bring together and homogenize most multi-wavelength data obtained within Herschel extragalactic survey fields and provide the astronomical community with a lasting legacy from the past decade of ground and space-based

extragalactic surveys. Within HELP, I serve as Project Scientist and lead the UWC node as well as the Data Fusion Work Package. Finally, I have been involved in the development of the science case and funding proposal for the Inter-University Institute for Data Intensive Astronomy (IDIA) based in Cape Town, where I lead work on Data Fusion and Machine Learning for Multi-Wavelength Galaxy Evolution Studies.

## Teaching

- While at the Department of Physics of Imperial College London, from 2003 to 2005, I have taught undergraduate students both in the class (quantum mechanics, solid state physics) and in the physics lab (astrophysical spectroscopy).
- While at the Department of Astronomy of the University of Padova, from 2006 to 2011, I have taught observational astrophysics and cosmology to undergraduate students.
- While at the Department of Physics of the University of the Western Cape, from 2011 to date, I have taught galaxy formation and evolution to undergraduate students both in the class and in the computer lab.
- I have supervised 2 BSc, 5 MSc and 4 PhD students: Lucia Dalla Valle (MSc, Mar 2007), Lucia Marchetti (MSc, Oct 2008), Giacomo Tarsi (MSc Jul 2009), Filippo Oppizzi (BSc, July 2010), Gabriele Mainetti (PhD, Mar 2011), Svetlana Starikova (PhD, Apr 2011), Lucia Marchetti (PhD, Oct 2012), Emmanuel Ocran (MSc, Dec 2015), Wathela Osman (BSc, Dec 2016), Lunga Mxhalisa (MSc, Expected Mar 2017), Emmanuel Ocran (PhD, Expected Dec 2018). Thesis topics included Observational and Interpretative Galaxy Evolution Studies, AstroInformatics and AstroStatistics, Software Development for Astronomical Data Reduction and Analysis, Image and Signal Processing.

## Outreach

- I am the founding coordinator of the Network of Italian Researchers in the Cape (NIRC), bringing together more than 50 Italian researchers working in the Cape and providing a platform for discussion about collaboration on research and development with the Italian government and industry. I have created and managed NIRC's online presence and its ResearchNight.it quarterly public talks reaching audiences of 100-150 people.
- I have coordinated the content and the production of videos for UWC online channels aimed at prospective students and featuring UWC Astronomy researchers and students.
- I have coordinated the production of press releases and I have given interviews about my research on the press and the radio.
- I have given popular astronomy talks in schools, science clubs, observatories and planetaria and I have written about popular astronomy for online and printed media.
- I have participated to UWC Astronomy's High School Outreach and Night Sky Viewings.

## Meetings

- SKA Pathfinders Radio Continuum Surveys Consortium 2015 Meeting (LOC & SOC, Kruger Park, South Africa, July 2015)
- "A Cosmic Census of the Galaxies in the Distant Universe", Lorentz Centre Workshop (SOC, Leiden, The Netherlands, June 2016)
- AstroInformatics 2017 Conference (LOC & SOC, Cape Town, South Africa, Nov 2017)



## Grants

- EU Erasmus Studentship to visit Copenhagen University (1998 - 1999, 5 KEuros)
- University of Padova PhD 3-year Studentship (2000-2003, **50 KEuros**)
- Gini Foundation Travel Grant to visit Imperial College London (2007, 5 KEuros)
- Lincei Academy Travel Grant to visit the University of Sussex (2010, 6 KEuros)
- SKA South Africa's Senior Research Fellowship (2011-2016, **150 KEuros**)
- PRIN-INAF 2011 Research Grant (2011, 10 KEuros within 60 KEuros Consortium)
- South Africa's NRF Travel Grant to visit the University of Naples (2011, 3 KEuros)
- South Africa's NRF Travel Grant to visit the University of Padova (2012, 2 KEuros)
- South Africa's NRF Travel Grant to visit the University of Padova (2013, 3 KEuros)
- EC FP7 SPACE HELP Research and Travel Grant (2014-2017, **100 KEuros**)
- South Africa's NRF Travel Grant to visit the University of Naples (2014, 3 KEuros)
- South Africa's NRF Travel Grant to visit ASI Space Data Center (2014, 3 KEuros)
- SA DST/UWC FP7 SPACE HELP Research Grant (2014-2017, **80 KEuros**)
- Italy - South Africa SKA Collaborative Research Grant (2015-2017, **60 KEuros**)

## Languages

- Italian: native
- English: fluent
- French: fair
- Spanish: basic

## Computing

- I have an in-depth knowledge installing, using and administering a wide variety of Unix-like operating systems and a working knowledge of Microsoft Windows operating systems. All other things being equal, however, Apple's Mac OS X has long been my operating system of choice.
- I am a proficient user of Microsoft Office (Word, Excel, PowerPoint), Apple iWork (Pages, Numbers, Keynote) and OpenOffice productivity tools.
- I have extensive experience in scientific programming, data analysis and GUI development using IDL, Java, Python/Jython and Unix-like shell scripting.
- I have extensive experience with IRAF/PyRAF, Astromatic and Casutools astronomical software tools as well as in their integration in data reduction and analysis, instrumental commissioning and data quality control pipelines..
- I have moderate experience using Matlab, Mathematica, R and x/g-gobi, supermongo, Fortran, C, C++, Perl, sed/awk and mysql/postgresql programming.
- I am an expert user of command-line and graphical tools for astronomical catalog and image visualization and manipulation such as Aladin, DS9, Gaia and Stilts/Topcat and in their integration with Virtual Observatory resources for archival research.
- I have substantial experience in HTML, PHP and CGI scripting applied to the production of static and dynamic web pages and moderate experience in web design, maintenance and administration running Apache, php/mysql, phpBB, TWiki, WordPress and Drupal.
- Within the ISO/ELAIS project I have contributed substantially to the production of a GUI-based software package (The LARI Package) for the interactive reduction of ISO-CAM/PHOT data exploiting a physical model of the detectors' behavior.
- Within the SWIRE and HerMES consortia I have led the production of a versatile set of software tools simulating Spitzer and Herschel maps and instrumental features. These tools were extensively used in designing the SWIRE and HerMES surveys and in producing simulations aimed at characterizing the survey selection function at IRAC/MIPS and PACS/SPIRE wavelengths.
- Within the SWIRE, HerMES and SERVS consortia I have been leading the development of an IRAC wide-area source detection and multi-wavelength cross-identification pipeline. This effort has in time evolved into the Spitzer Data Fusion project, which I have led since its inception and whose main aim is the production of an IRAC-selected multi-wavelength catalog and its exploitation toward studies of the cosmic star formation and black hole accretion history.
- Within the Herschel/SPIRE project I have contributed to the full development cycle of the Herschel Observation Planning Tool (HSPOT) and of the Herschel Interactive Processing Environment (HIPE), from the compilation of detailed user requirements to the realization of GUIs, the implementation of map-making algorithms and finally the evaluation of users' feedback, as member of a number of bodies established by ESA and the SPIRE consortium.

# Collaborations

Collaborative activities I lead are indicated in bold.

- ELAIS (ISO Open Time Program) Science Team (2001 - 2005)
- SWIRE (Spitzer Legacy Program) Science Team (2003 - date)
- SPIRE Science Team (2003 - date)
- SPIRE High-Redshift Galaxies Science Team (HerMES GT KP) (2003 - date)
- SPIRE Low-Redshift Galaxies Science Team (DGS/HRS/VNGS GT KPs) (2003 - date)
- SPIRE ICC Observation Planning & Software Development Teams (2003 - 2011)
- Herschel Data Processing Users Group (2003 - 2005 & 2007 - 2011)
- SHADES Consortium (2004 - 2011)
- JCMT Legacy Survey Consortium (2005 - 2011)
- e-Merlin Lens Legacy Program Consortium (2008 - date)
- H-ATLAS (Herschel OT KP) Science Team - (2008 - date)
- SERVS/DEEPDRILL (Spitzer Exploratory Science Program) Consortium (2008 - date)
- **Spitzer Data Fusion Collaboration Lead (2009 - date)**
- SAFARI/SPICA Consortium & Science Team (2008 - date)
- EMU (ASKAP Survey Program) Consortium (2009 - date)
- SKA Pathfinders Radio Continuum Surveys Consortium (2009 - date)
- LADUMA & MIGHTEE (MeerKAT Survey Program) Consortia (2010 - date)
- WODAN (WSRT APERTIF Survey Program) Consortium (2010 - date)
- VIDEO (ESO VISTA Public Survey Program) Consortium (2010 - date)
- **VOICE (ESO VST GT Survey Program) Consortium Co-PI (2010 - date)**
- Euclid Consortium & Science Team (2010 - 2012)
- COSMOS Consortium (2011 - date)
- LOFAR Survey Key Science Project Consortium (2011 - date)
- SALT-2 Science Team (2012 - date)
- **EU FP7 SPACE HELP Project Scientist & UWC Lead (2013 - date)**
- **Italy - South Africa SKA Science Collaboration UWC & SA Lead (2014-date)**

- SKA Continuum Surveys Working Group Member (2014-date)
- **EU COST BigSkyEarth Action UWC & SA Lead (2014-date)**
- Inter-University Institute for Data Intensive Astronomy (IDIA) Co-I (2015-date)
- FIRSPEX and FLARE (ESA M5 Proposed Missions) Consortia (2015 - date)
- VEILS and SHARKS (ESO VISTA Public Survey Programs) Consortia (2015 - date)
- SALT Gravitational Lensing Project Consortium (2015 - date)

## References

The following can all be contacted upon request:

- Dr. Dave Clements, Imperial College London, UK  
(ELAIS & H-ATLAS & HerMES & SCUBA2 & SHADES & SPIRE & SWIRE)
- Prof. Alberto Franceschini, University of Padova, Italy  
(ELAIS & HerMES & SPIRE & SWIRE)
- Dr. Matt Jarvis, University of Oxford, UK & University of the Western Cape, SA  
(H-ATLAS & HELP & LOFAR & MeerKAT & SERVS/DEEPDRILL & VIDEO)
- Dr. Mark Lacy, NAASC/NRAO, US  
(SERVS/DEEPDRILL)
- Prof. Seb Oliver, University of Sussex, UK  
(ELAIS & HELP & HerMES & SPIRE & SWIRE)
- Prof. Michael Rowan-Robinson, Imperial College London, UK  
(ELAIS & HerMES & SPIRE & SWIRE)

## Talks

I have given more than 70 talks about my research at international conferences (excluding collaboration meetings), including 10 invited talks (indicated in bold).

**17 May 2001** - "GAIA : a European Space Project" Summer School, 14-18 May 2001, Ecole de Physique des Houches, Les Houches, France, "GAIA Galaxy Survey: a Multi-Color Galaxy Survey with GAIA", **Invited Talk**

25 September 2001 - "Probing the Origin of the Extragalactic Background Radiation" EU TMR Network Meeting, 25-26 September 2001, Imperial College, London, UK, "ELAIS 15  $\mu\text{m}$  Northern Fields: A Status Report on Data Reduction with the LARI Method"

6 February 2002 - Padova Workshop on Galaxy Formation and Evolution, 6-7 February 2002, Department of Astronomy, University of Padova, Padova, Italy, "ISO Extragalactic Surveys: Data Reduction with the LARI Method"

27 June 2002 - Exploiting the ISO Data Archive: Infrared Astronomy in the Internet Age, 24-27 June, 2002, Sigüenza, Spain, "Final Analysis of ELAIS 15  $\mu\text{m}$  Northern Fields: Data Reduction with the LARI Method"

27 August 2002 - Asiago Rendez-Vous 2002: Nuove prospettive per l'Astronomia Italiana dalla Terra e dallo Spazio, 26-27 August 2002, Asiago Astrophysical Observatory, Asiago, Italy, "The ELAIS Fields: Final Results from ISO and Future Prospects"

4 September 2002 - ROE Workshop 2002, "The Invisible Universe - Survey Astronomy at Wavelengths beyond 1 Micron", 4-5 September 2002, ROE, Edinburgh, UK, "The ELAIS Fields: Final Results from ISO and Future Prospects"

**17 December 2002** - PACS Extragalactic Programs Italian Meeting, SISSA/ISAS, Trieste, Italy, "Extragalactic Surveys with Herschel", **Invited Talk**

16 April 2003 - 47<sup>th</sup> SAIIt (Società Astronomica Italiana - Italian Astronomical Society) Congress, "Nuovi Orizzonti dell'Astrofisica Italiana", 14-17 April 2003, Trieste, Italy, "The ELAIS Fields: Final Results from ISO and Future Prospects"

18 June 2003 - Multi-Wavelength Cosmology Conference, 17-20 June 2003, Mykonos, Greece, "Final Analysis of ELAIS 15  $\mu\text{m}$  Fields"

11 Aug 2004 - SWIRE Science Team Meeting, 9-13 August 2004, Imperial College, London, UK, "SWIRE Data Reduction : Catalogue Validation & Selection Function Characterization Through Simulations"

30 September 2004 - SPIRE Consortium Meeting, 28-30 September 2004, RAL, UK, "SPIRE Interactive Analysis Software : Presentation and Demonstration"

11 May 2005 - SPIRE Photometer Simulator Workshop, 11 May 2005, RAL/CCLRC, Chilton,

UK, "SPIRE Data Processing"

**21 July 2005** - SPIRE Consortium Meeting, 19-21 July 2005, CalTech, Pasadena, California, USA, "SPIRE Data Products", **Invited Talk**

**31 January 2007** - Herschel Open Time Extragalactic Key Program Workshop, 31 January 2007, Padova, Italy, "Observing Extragalactic Surveys with SPIRE", **Invited Talk**

**28 Mar 2007** - "The Origin of Galaxies : Exploring Galaxy Evolution with the New Generation of Infrared-Millimetre Facilities", Universitätszentrum, Obergurgl, Austria, "The FIR & Sub-mm View on Galaxies: from Spitzer & SCUBA to Herschel & SCUBA2", **Invited Talk**

21 April 2007 - 51<sup>st</sup> SAIIt (Società Astronomica Italiana - Italian Astronomical Society) Congress, Firenze, Italy, "The FIR & Sub-mm View on Galaxies: from Spitzer & SCUBA to Herschel & SCUBA2"

14 May 2007 - Weekly Seminar, UBC, Vancouver, Canada, "The FIR & Sub-mm View on Galaxies: from Spitzer & SCUBA to Herschel & SCUBA2"

**19 June 2007** - "The Astrophysical Science Cases at Dome C" 2nd ARENA Conference, Potsdam, Berlin, Germany, "Sub-mm/FIR Galaxy Evolution Studies at Dome C", **Invited Talk**

**26 June 2007** - "Submm/FIR Astronomy from Antarctica : Toward a Large Single-Dish Telescope at Dome C?" ARENA Workshop, CEA, France, "Sub-mm/FIR Galaxy Evolution Studies at Dome C", **Invited Talk**

24 July 2007 - Italian Antarctic Astronomy Meeting, INAF, Monte Mario, Roma, Italy, "Sub-mm/FIR Galaxy Evolution Studies at Dome C"

**1-9 August 2007** - "The Large Millimeter Telescope : First-Light Science and Future Surveys", Guillermo Haro Workshop 2007, INAOE, Mexico, "Studying the Obscured Cosmic Star Formation History of the Universe with Spitzer and Herschel" **Invited Talk**

21 Nov 2007 - Weekly Seminar, NRAO, Socorro, New Mexico, USA, "Studying the Obscured Cosmic Star Formation History of the Universe with Spitzer and Herschel"

16 Jan 2008 - Padova Astronomical Observatory Weekly AstroPizza, Padova, Italy, "FIR & sub-mm Astronomy comes of age : Herschel Space Observatory Observing Opportunities"

18-19 February 2008 - EARA Workshop, "The Herschel Promises for Galaxy Evolution Studies", IAP, Paris, France, "Studying the Obscured Cosmic Star Formation History of the Universe with Spitzer and Herschel"

6-7 March 2008 - SAGACE Workshop, Department of Physics, La Sapienza University, Roma, Italy, "A sub-mm & mm Spectroscopic View on Herschel & SCUBA2 Starburst Galaxies :

Planning for SAGACE Follow-Up Studies”

2-6 June 2008 - SPIRE ICC Meeting, NHSC, IPAC, CalTech, Pasadena, USA, ”SPIRE Visualization Tools”

1-3 December 2008 - EURO-VO ”Multi-Wavelength Astronomy & Virtual Observatory” Workshop, ESAC/ESA, Madrid, Spain, ”Local Benchmarks of IR Galaxy Evolution : The SWIRE-SDSS Far-Infrared Local Luminosity Function & VO Tools”.

23 January 2009 - HerMES Meeting, CalTech, Pasadena, USA, ”HerMES Herschel Observations”

13 May 2009 - ARENA3 Conference ”An astronomical Observatory at Dome C (Antarctica) for the next decade”, Villa Tuscolana, Frascati, Italy, ”Resolving the FIR/SMM Background from Concordia Station”

15 June 2009 - HerMES Meeting, RAL, UK, ”HerMES Herschel Observations”

3 July 2009 - VIIth Marseille International Cosmology Conference ”Harvesting the Desert : The Universe Between Redshift 1 and 3”, Marseille, France, ”The Herschel Multi-tiered Extragalactic Survey (HerMES) - Measuring the Infrared Galaxy Formation History of the Universe”

5 October 2009 - HerMES Meeting, Imperial College, London, UK, ”HerMES Multi-Wavelength Data Fusion”

1 December 2009 - HerMES Meeting, University of Sussex, Brighton, UK, ”HerMES Multi-Wavelength Data Fusion”

15 June 2010 - HerMES Meeting, University of Padova, Italy, ”HerMES Multi-Wavelength Data Fusion”

**25 October 2010** - ”The Herschel Space Observatory : Rationale, Mission and Challenges”, National School of Astrophysics, 25-29 October 2010, Asiago Astrophysical Observatory, Asiago, Italy, **Invited Talk**

7 December 2010 - HerMES SCAT/XID Meeting, University of Sussex, Brighton, UK, ”HerMES Data Fusion Wide and Deep”

18 January 2011 - HerMES Consortium Meeting, UBC, Vancouver, Canada, ”Multi-Wavelength Data Fusion Deep & Wide for HerMES DR1 Science”

14 March 2011 - SERVS Consortium Meeting, IAP, Paris, France, ”IRAC12 Band-Merging & Multi-Wavelength Data Fusion for SERVS Science”

1 September 2011 - ”Feeding the Giants : ELTs in the era of Surveys” ESO Workshop, Ischia, Italy, ”HerMES : The Herschel Multi-Tiered Extragalactic Survey”



11 November 2011 - SKA-SA 2011 Postgraduate Bursary Conference, Stellenbosch, South Africa, "From Spitzer to Herschel Extragalactic Surveys : The Evolution of the Infrared Luminosity Function and of the Cosmic Star Formation Rate Density"

22 December 2011 - Weekly Seminar, USM/LMU, Munich, Germany, "From Spitzer to Herschel Extragalactic Surveys : The Evolution of the Infrared Luminosity Function and of the Cosmic Star Formation Rate Density"

23 Jan 2012 - LADUMA Consortium Meeting, UCT, Cape Town, South Africa, "LADUMA Ancillary Data"

16 February 2012 - "Astrophysics from the radio to the sub-millimetre : Planck and other experiments in temperature and polarization", Bologna, Italy, "From Spitzer to Herschel Extragalactic Surveys : The Evolution of the Infrared Luminosity Function and of the Cosmic Star Formation Rate Density"

19 June 2012 - "First National Meeting on Science and Technology with SKA : The Italian Pathway to SKA", Roma, Italy, "South(ern) African Astronomy on its way toward the SKA"

25 June 2012 - Weekly Seminar, INAF-IRA, Bologna, Italy, "South(ern) African Astronomy on its way toward the SKA"

18 Oct 2012 - "Science from the Next Generation Imaging and Spectroscopic Surveys" ESO Workshop, Garching, Munich, Germany, "The VST GT SUDARE/VOICE Project: Galaxy Evolution, AGN Variability and Supernova Host Galaxies with VST"

**5 Nov 2012** - SALT/MeerKAT Workshop, MeerKAT Office, Cape Town, South Africa, "MIGHTEE Ancillary Data Needs/Plans", **Invited Talk**

29 November 2012 - SKA-SA 2012 Postgraduate Bursary Conference, Stellenbosch, South Africa, "The SUDARE/VOICE Survey : The Deaths of Stars and The Lives of Galaxies"

21 June 2013 - MIGHTEE Consortium Meeting, UCT, Cape Town, South Africa, "MIGHTEE Ancillary Data Needs/Plans"

18 September 2013 - "Synergistic Science with Euclid and the Square Kilometre Array", University of Oxford, UK, "The Obscured Cosmic Star Formation History : From Spitzer/Herschel's Era to Euclid/SKA's"

29 November 2013 - SKA-SA 2013 Postgraduate Bursary Conference, Stellenbosch, South Africa, "The Obscured Cosmic Star Formation History : From Herschel to the SKA"

04 June 2014 - SKA Pathfinders Radio Continuum Surveys 2014 Meeting, Catania, Italy, "The Obscured Cosmic Star Formation History and the Cross-Identification Challenge : From Her-

schel to the SKA (Pathfinders)”

28 November 2014 - ”The Universe of Digital Sky Surveys” Conference, Naples, Italy, ”HELP-ing Digital Sky Surveys : The Herschel Extragalactic Legacy Project”

3 December 2014 - CHPC Conference 2014, Kruger Park, South Africa, ”Big Data and The Coming of Age of Multi-Wavelength Astrophysics”

**27 Jan 2015** - IBM/IDIA Big Data and Exascale Technology Workshop, 27 Jan 2015, UCT, Cape Town, ”Big Data and The Coming of Age of Multi-Wavelength Astrophysics”, **Invited Talk**

10 March 2015 - UK-SA Royal Society Workshop on ”The Role of AGN in Galaxy Evolution”, Oxford, UK, ”The Spitzer Data Fusion and the SERVS/DEEPDRILL Project”

31 March 2015 - ”Netherlands / South Africa Radio Continuum Surveys Workshop”, UCT, Cape Town, South Africa, ”HELP-ing Radio Continuum Surveys : The Herschel Extragalactic Legacy Project”

2 June 2015 - SALT Science Conference 2015, Stellenbosch, South Africa ”HELP-ing Deep & Wide Sky Surveys : The Herschel Extragalactic Legacy Project”

2 July 2015 - SKA Pathfinders Radio Continuum Surveys 2015 Meeting, Kruger Park, South Africa, ”HELP-ing Radio Continuum Surveys : The Herschel Extragalactic Legacy Project”

8 October 2015 - AstroInformatics 2015 Conference, Dubrovnik, Croatia, ”HELP-ing Multi-Wavelength Sky Surveys : The Herschel Extragalactic Legacy Project”

21 October 2015 - ”The Many Facets of Extragalactic Radio Surveys : Towards New Scientific Challenges” Conference, Bologna, Italy, ”HELP-ing Radio Continuum Surveys : The Herschel Extragalactic Legacy Project”

20 November 2015 - ”Making Sense of MIGHTEE/EMU : Radio Source Identification & Characterization”, MIGHTEE/EMU Workshop, UCT, Cape Town, South Africa

3 February 2016 - ”PHISCC 2016: Upgrading Our HI Toolkit” Conference, Cape Town, South Africa, ”HELP-ing HI Surveys : The Herschel Extragalactic Legacy Project”

2 March 2016 - UK-SA Royal Society Workshop on ”The Role of AGN in Galaxy Evolution”, Muizenberg, Cape Town, South Africa, ”HELP-ing Galaxy Evolution Surveys : The Herschel Extragalactic Legacy Project”

**12 April 2016** - IDIA Data Science Workshop, 12 Apr 2016, UWC, Cape Town, ”Data Fusion & Data Mining @ IDIA : The Coming of Age of Multi-Wavelength Astrophysics”, **Invited Talk**

12 April 2016 - National Astronomy & Space Science Program Colloquium, UCT, Cape Town,

”The Universe in Full Color : Multi-Wavelength Studies of the Cosmic Star Formation History”

26 August 2016 - High-Energy Astrophysics in Southern Africa 2016 Conference, SAAO, Cape Town, South Africa, ”HELP-ing High-Energy Surveys : The Herschel Extragalactic Legacy Project”

3 November 2016 - SKA Pathfinders Radio Continuum Surveys 2016 Meeting, Goa, India, ”HELP-ing Radio Continuum Surveys : The Herschel Extragalactic Legacy Project”

## Publications

My full list of *published* papers totals  $\sim 180$ , including  $\sim 160$  refereed papers, 21 of which have received more than 100 citations each. The number of citations generated by *refereed* papers is  $\sim 9000$ , leading to an *impact factor* (as defined by Hirsch 2005 and Hirsch 2008) with an  $h$  index of 53 and an  $\hbar$  index of 4 (computed using the ADS and counting from July 2004, i.e. the end of my PhD studies and the date of publication of my first paper, to date). Publications which have been accepted for publication (but not published as yet) as well as some which are currently with the referee are also listed (but not considered in the numbers above) to illustrate my recent and ongoing work. My last name is in bold when I am one of the first three authors of the paper. I have also contributed to ISO and Herschel software manuals and tutorials and to the documentation accompanying the public release of ISO, Spitzer and Herschel catalogs and images as well as of multi-wavelength catalogs.

### 2002

**Vaccari M.** 2002, "GAIA Galaxy Survey: A Multi-Colour Galaxy Survey with GAIA", Proceedings of "GAIA: A European Space Project", EAS Publications, 2, 313 <http://adsabs.harvard.edu/abs/2002EAS.....2..313V>

### 2003

**Franceschini A.** et al. 2003, "Deep Infrared Surveys and their Cosmological Implications", The Messenger, 113, 56 <http://adsabs.harvard.edu/abs/2003Msngr.113...56F>

**Lari C.** et al. 2003, "The LARI Method for ISO-CAM/PHOT Data Reduction and Analysis", ESA SP-511, 349 <http://adsabs.harvard.edu/abs/2003eida.conf..349L>

**Vaccari M.** et al. 2003, "Final Analysis of ELAIS 15  $\mu\text{m}$  Fields", Supplementi alle Memorie della Società Astronomica Italiana, 3, 173 <http://adsabs.harvard.edu/abs/2003MSAIS...3..173V>

**Vaccari M.** et al. 2003, "The LARI Method for ISO-CAM/PHOT Data Reduction and Analysis", Supplementi alle Memorie della Società Astronomica Italiana, 3, 376 <http://adsabs.harvard.edu/abs/2003MSAIS...3..376V>

### 2004

**Afonso-Luis A.** et al. 2004, "A study of the 15  $\mu\text{m}$  quasars in the ELAIS N1 and N2 fields", MNRAS, 354, 961 <http://adsabs.harvard.edu/abs/2005MNRAS.354...961A>

**Gonzalez-Solares E.** et al. 2004, "Large Scale Structure in the ELAIS S1 Survey", MNRAS, 352, 44 <http://adsabs.harvard.edu/abs/2004MNRAS.352...44G>

**Johansson P.H., Väisänen P. & Vaccari M.** 2004, "A population of extreme mid-to-near-infrared sources: obscured AGN and dusty starbursts", A&A, 427, 795 <http://adsabs.harvard.edu/abs/2004A&A...427..795J>

**Manners J.** et al. **2004**, "Mid-infrared sources in the ELAIS Deep X-ray Survey", MNRAS, 355, 97 <http://adsabs.harvard.edu/abs/2004MNRAS.355...97M>

**Rowan-Robinson M.** et al. **2004**, "The European Large Area ISO Survey (ELAIS): The Final Band-Merged Catalogue", MNRAS, 351, 1290 <http://adsabs.harvard.edu/abs/2004MNRAS.351.1290R>

**Serjeant S.** et al. **2004**, "The European Large Area ISO Survey IX: the 90  $\mu\text{m}$  luminosity function from the Final Analysis sample", MNRAS, 355, 813 <http://adsabs.harvard.edu/abs/2004MNRAS.355...813S>

**Vaccari M.** et al. **2004**, "Final Analysis of ELAIS 15  $\mu\text{m}$  Fields", Proceedings of "Multi-Wavelength Cosmology", A&SS Library, 301 <http://adsabs.harvard.edu/abs/2004muco.conf..177V>

## 2005

**Dennefeld M.** et al. **2005**, "FIRBACK IV. Towards the nature of the 170 micron population", A&A, 440, 5 <http://adsabs.harvard.edu/abs/2005A&A...440....5D>

**Fang F.** et al. **2005**, "Large-Scale Structure in the Spitzer Wide-Area Infrared Extragalactic Survey", AAS Meeting 207, BAAS, 37, 1255 <http://adsabs.harvard.edu/abs/2005AAS...207.6349F>

**Franceschini A.** et al. **2005**, "Complete Multiwavelength Characterization of Faint Chandra X-ray Sources Seen in the Spitzer Wide-Area IR Extragalactic (SWIRE) Survey", AJ, 129, 2074 <http://adsabs.harvard.edu/abs/2005AJ....129.2074F>

**Gonzalez-Solares E.** et al. **2005**, "The European Large Area ISO Survey (ELAIS): Optical Identifications of 15  $\mu\text{m}$  and 1.4 GHz sources in N1 and N2", MNRAS, 358, 333 <http://adsabs.harvard.edu/abs/2005MNRAS.358...333G>

**Mortier A.** et al. **2005**, "The SCUBA Half Degree Extragalactic Survey (SHADES) – I. Survey motivation, design and data processing", MNRAS, 363, 563 <http://adsabs.harvard.edu/abs/>

**Rowan-Robinson M.** et al. **2005**, "Spectral energy distributions and luminosities of galaxies and AGN in the SPITZER SWIRE Legacy Survey", MNRAS, 129, 1183 <http://adsabs.harvard.edu/abs/>

**Taylor E.** et al. **2005**, "Properties of FIRBACK-ELAIS 175 micron sources in the ELAIS N2 region", MNRAS, 361, 1352 <http://adsabs.harvard.edu/abs/2005MNRAS.361.1352T>

**Vaccari M.** et al. **2005**, "Final Analysis of ELAIS 15  $\mu\text{m}$  Observations", ESO Astrophysics Symposia, 2, 467 <http://adsabs.harvard.edu/abs/2005mmgf.conf..467V>

**Vaccari M.** et al. **2005**, "Final Analysis of ELAIS 15  $\mu\text{m}$  Observations: Method, Reduction and Catalogue", MNRAS, 358, 397 <http://adsabs.harvard.edu/abs/2005MNRAS.358.397V>

## 2006

**Babbedge T., Rowan-Robinson M., Vaccari M.** et al. **2006**, "Luminosity functions for galaxies and quasars in the Spitzer Wide-Area Infrared Extra-galactic (SWIRE) Legacy survey", MNRAS, 370, 1159 <http://adsabs.harvard.edu/abs/2006MNRAS.370.1159B>

**Coppin K.** et al. **2006**, "The SCUBA Half Degree Extragalactic Survey (SHADES) – II. Submillimetre maps, source catalogues and number counts", MNRAS, 372, 1621 <http://adsabs.harvard.edu/abs/2006MNRAS.372.1621C>

**Franceschini A.** et al. **2006**, "Cosmic evolution of the galaxy mass and luminosity functions by morphological type from multi-wavelength data in the CDF-South", A&A, 453, 397 <http://adsabs.harvard.edu/abs/2006A&A...453..397F>

**Gonzalez-Solares E.** et al. **2006**, "Angular correlation of 3.6 and 24 micron galaxies in the SWIRE N1 field", Proceedings of "The Spitzer Space Telescope: New Views of the Cosmos", ASP Conference Series, 357, 248 <http://adsabs.harvard.edu/abs/2006ASPC..357..248G>

## 2007

**Aretxaga, I.** et al. **2007**, "The SCUBA Half Degree Extragalactic Survey - IV. Radio-mm-FIR photometric redshifts", MNRAS, 379, 1571 <http://adsabs.harvard.edu/abs/2007MNRAS.379.1571A>

**Iverson, R.** et al. **2007**, "The SCUBA Half Degree Extragalactic Survey - III. Identification of radio and mid-infrared counterparts to submillimetre galaxies", MNRAS, 380, 199 <http://adsabs.harvard.edu/abs/2007MNRAS.380..199I>

**Takagi T.** et al. **2007**, "The SCUBA Half Degree Extragalactic Survey (SHADES) - V. Submillimetre properties of near-infrared-selected galaxies in the Subaru/XMM-Newton deep field", MNRAS, 381, 1154 <http://adsabs.harvard.edu/abs/2007MNRAS.381.1154T>

**Waddington I.** et al. **2007**, "Clustering of galaxies at 3.6  $\mu\text{m}$  in the Spitzer Wide-area Infrared Extragalactic legacy survey", MNRAS, 381, 1437 <http://adsabs.harvard.edu/abs/2007MNRAS.381.1437W>

## 2008

**Clements D.L., Vaccari M.** et al. **2008**, "The SCUBA Half-Degree Extragalactic Survey - VI. "The Nature of Faint Submm Galaxies in SHADES and SWIRE Surveys", MNRAS, 2008, 387, 247 <http://adsabs.harvard.edu/abs/2008MNRAS.387..247C>

**Coppin K.** et al. **2008**, "The SCUBA Half Degree Extragalactic Survey - VI. 350- $\mu\text{m}$

mapping of submillimetre galaxies”, MNRAS, 384, 1597 <http://adsabs.harvard.edu/abs/2008MNRAS.384.1597C>

**Dye S.** et al. **2008**, ”The SCUBA Half Degree Extragalactic Survey (SHADES) - VII. Optical/IR photometry and stellar masses of submillimetre galaxies”, MNRAS, 386, 1107 <http://adsabs.harvard.edu/abs/2008MNRAS.386.1107D>

**Fang F.** et al. **2008**, ”Galaxy Clustering in Far-Infrared SWIRE Fields”, Proceedings of The Second Annual Spitzer Science Center Conference on Infrared Diagnostics of Galaxy Evolution, ASPC, 381, 225 <http://adsabs.harvard.edu/abs/2008ASPC..381..225F>

**Franceschini A., Rodighiero G. & Vaccari M.** **2008**, ”Extragalactic optical-infrared background radiation, its time evolution and the cosmic photon-photon opacity”, A&A, 487, 837 <http://adsabs.harvard.edu/abs/2008A%26A...487..837F>

**Hernan-Caballero A.** et al. **2008**, ”A 15 micron selected sample of high-z starbursts and AGNs”, Proceedings of The Second Annual Spitzer Science Center Conference on Infrared Diagnostics of Galaxy Evolution, ASPC, 381, 367 <http://adsabs.harvard.edu/abs/2008ASPC..381..367H>

**Rowan-Robinson M.** et al. **2008**, ”Understanding Infrared Galaxy Populations: the SWIRE Legacy Survey”, Proceedings of The Second Annual Spitzer Science Center Conference on Infrared Diagnostics of Galaxy Evolution, ASPC, 381, 216 <http://adsabs.harvard.edu/abs/2008ASPC..381..216R>

**Rowan-Robinson M.** et al. **2008**, ”Photometric Redshifts in the SWIRE Survey”, MNRAS, 386, 697 <http://adsabs.harvard.edu/abs/2008MNRAS.386..697R>

**Serjeant S.** et al. **2008**, ”The SCUBA Half Degree Extragalactic Survey (SHADES) – VIII. the environments of submm galaxies and the link to the cosmic near-infrared background”, MNRAS, 386 1927 <http://adsabs.harvard.edu/abs/2008MNRAS.386.1907S>

**Shupe D.L.** et al. **2008**, ”Galaxy Counts at 24  $\mu\text{m}$  in the Swire Fields”, AJ, 135, 1050 <http://adsabs.harvard.edu/abs/2008AJ....135.1050S>

**Vaccari M. & Franceschini A.** **2008**, ”The Formation & Evolution of Galaxies making up the CIRB : FIR/Submm Extragalactic Surveys from Dome C”, Proceedings of the 2<sup>nd</sup> ARENA Conference, EAS Publications, 33, 183 <http://adsabs.harvard.edu/abs/2008EAS...33..183V>

## **2009**

**Ferrari L.** et al. **2009**, ”Spectroscopic Active Galaxies and Clusters Explorer”, AIPC, 1185, 483 <http://adsabs.harvard.edu/abs/2009AIPC.1185..483F>

**Franceschini A., Rodighiero G. & Vaccari M.** **2009**, ”Background radiations and the cosmic photon-photon opacity”, AIPC, 1112, 101 <http://adsabs.harvard.edu/abs/2009AIPC.1112..101F>

**Hernan-Caballero A.** et al. **2009**, "Mid-infrared spectroscopy of infrared-luminous galaxies at  $z \simeq 0.5-3$ ", MNRAS, 395, 1695 <http://adsabs.harvard.edu/abs/2009MNRAS.395.1695H>

**Khan S.** et al. **2009**, "On the nature of the first galaxies selected at  $350 \mu\text{m}$ ", ApJ, 706, 319 <http://adsabs.harvard.edu/abs/2009ApJ...706..319K>

**Roseboom I.G., Oliver S., Parkinson D. & Vaccari, M.** **2009**, "Multi-Wavelength Identification of SHADES/AZTEC Sources", MNRAS, 400, 1062, <http://adsabs.harvard.edu/abs/2009MNRAS.400.1062R>

**Spinoglio L.** et al. **2009**, "Spectroscopic Cosmological Surveys in the Far-IR", Proceedings of the "SPICA Joint European/Japanese Workshop", EDP Sciences <http://adsabs.harvard.edu/abs/2009sitc.conf.4002S>

**Trichas M.** et al. **2009**, "Testing the starburst/AGN connection with SWIRE X-ray/ $70 \mu\text{m}$  sources", MNRAS, 399, 663 <http://adsabs.harvard.edu/abs/2009MNRAS.399..663T>

**Vaccari M.** et al. **2009**, "Local Benchmarks of IR Galaxy Evolution : The SWIRE-SDSS Far-Infrared Local Luminosity Function & VO Tools", Proceedings of the "Multi-Wavelength Astronomy and Virtual Observatory" Workshop, ESA Publications <http://adsabs.harvard.edu/abs/2009mavo.proc...45V>

## 2010

**Bendo G.** et al. **2010**, "The JCMT Nearby Galaxies Legacy Survey - III. Comparisons of cold dust, polycyclic aromatic hydrocarbons, molecular gas, and atomic gas in NGC 2403", MNRAS, 402, 1409 <http://adsabs.harvard.edu/abs/2010MNRAS.402.1409B>

**Bendo G.J.** et al. **2010**, "The Herschel Space Observatory view of dust in M81", A&A, 518, L65 <http://adsabs.harvard.edu/abs/2010A&A...518L..65B>

**Boselli A.** et al. **2010**, "FIR colours and SEDs of nearby galaxies observed with Herschel", A&A, 518, L61 <http://adsabs.harvard.edu/abs/2010A&A...518L..61B>

**Boselli A.** et al. **2010**, "The Herschel Reference Survey", PASP, 122, 261 <http://adsabs.harvard.edu/abs/2010PASP..122..261B>

**Brisbin D.** et al. **2010**, "The Deep SPIRE HerMES Survey: Spectral Energy Distributions and their Astrophysical Indications at High Redshift", MNRAS, 409, 66 <http://adsabs.harvard.edu/abs/2010MNRAS.409...66B>

**Buat V.** et al. **2010**, "Measures of star formation rates from Infrared (Herschel) and UV (GALEX) emissions of galaxies in the HerMES fields", MNRAS, 409, L1 <http://adsabs.harvard.edu/abs/2010MNRAS.409L...1B>



- Cava A.** et al. **2010**, "HerMES : SPIRE detection of high redshift massive compact galaxies in GOODS-N field", MNRAS, 409, 19 <http://adsabs.harvard.edu/abs/2010MNRAS.409L..19C>
- Chapman S.C.** et al. **2010**, "Herschel-SPIRE, Far-Infrared Properties of Millimetre-Bright and -Faint Radio Galaxies", MNRAS, 409, L13 <http://adsabs.harvard.edu/abs/2010MNRAS.409L..13C>
- Ciesla L.** et al. **2010**, "SED fitting of nearby galaxies in the Herschel Reference Survey", SF2A-2010: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics. Eds.: S. Boissier, M. Heydari-Malayeri, R. Samadi and D. Valls-Gabaud, p.31 <http://adsabs.harvard.edu/abs/2010sf2a.conf...31C>
- Cooray A.** et al. **2010**, "HerMES: Halo Occupation Number and Bias Properties of Dusty Galaxies from Angular Clustering Measurements", A&A, 518, L22 <http://adsabs.harvard.edu/abs/2010A&A...518L..22C>
- Coppin K.** et al. **2010**, "Mid-infrared Spectroscopy of Candidate Active Galactic Nuclei-dominated Submillimeter Galaxies", ApJ, 713, 503 <http://adsabs.harvard.edu/abs/2010ApJ...713..503C>
- Cortese L.** et al. **2010**, "Herschel-SPIRE observations of the disturbed galaxy NGC4438", A&A, 518, L63 <http://adsabs.harvard.edu/abs/2010A&A...518L..63C>
- Davies J.I.** et al. **2010**, "On the Origin of M81 Group Extended Dust Emission", MNRAS, 409, 12 <http://adsabs.harvard.edu/abs/2010MNRAS.409..102D>
- Eales S.** et al. **2010**, "The Herschel ATLAS", PASP, 122, 499 <http://adsabs.harvard.edu/abs/2010PASP...122..499E>
- Eales S.A.** et al. **2010**, "First results from HerMES on the evolution of the submillimetre luminosity function", A&A, 518, L23 <http://adsabs.harvard.edu/abs/2010A&A...518L..23E>
- Eales S.A.** et al. **2010**, "Mapping the interstellar medium in galaxies with Herschel/SPIRE", A&A, 518, L62 <http://adsabs.harvard.edu/abs/2010A&A...518L..62E>
- Elbaz D.** et al. **2010**, "Herschel unveils a puzzling uniformity of distant dusty galaxies", A&A, 518, L29 <http://adsabs.harvard.edu/abs/2010A&A...518L..29E>
- Franceschini A. & Vaccari M.** **2010**, "Cosmological Surveys in the FIR/Sub-mm", Proceedings of the ARENA3 Conference, EAS Publications, 40, 417 <http://adsabs.harvard.edu/abs/2010EAS....40..417F>
- Franceschini A., Rodighiero G., Vaccari M.** et al. **2010**, "Galaxy Evolution from Deep Multi-Wavelength Infrared Surveys : A Prelude to Herschel", A&A, 517, 74 <http://adsabs.harvard.edu/abs/2010A&A...517A..74F>

- Galametz M.** et al. **2010**, "Herschel photometric observations of the nearby low metallicity irregular galaxy NGC 6822", A&A, 518, L55 <http://adsabs.harvard.edu/abs/2010A&A...518L..55G>
- Glenn J.** et al. **2010**, "HerMES: Deep Galaxy Number Counts from a P(D) Fluctuation Analysis of SPIRE Science Demonstration Phase Observations", MNRAS, 409, 109 <http://adsabs.harvard.edu/abs/2010MNRAS.409..109G>
- Gomez H.L.** et al. **2010**, "The dust morphology of the elliptical Galaxy M86 with SPIRE", A&A, 518, L45 <http://adsabs.harvard.edu/abs/2010A&A...518L..45G>
- Griffin M.J.** et al. **2010**, "The Herschel-SPIRE instrument and its in-flight performance", A&A, 518, L3 <http://adsabs.harvard.edu/abs/2010A&A...518L...3G>
- Hatziminaoglou E.** et al. **2010**, "HerMES: Far-infrared properties of known AGN in the HerMES fields", A&A, 518, L33 <http://adsabs.harvard.edu/abs/2010A&A...518L..33H>
- Hwang H.S.** et al. **2010**, "Evolution of Dust Temperature of Galaxies through Cosmic Time as seen by Herschel", MNRAS, 409, 75 <http://adsabs.harvard.edu/abs/2010MNRAS.409..75H>
- Ibar E.** et al. **2010**, "H-ATLAS: PACS imaging for the Science Demonstration Phase", MNRAS, 409, 38 <http://adsabs.harvard.edu/abs/2010MNRAS.409...38I>
- Iverson R.J.** et al. **2010**, "The far-infrared/radio correlation as probed by Herschel", A&A, 518, L31 <http://adsabs.harvard.edu/abs/2010A&A...518L..31I>
- Magdis G.** et al. **2010**, "Herschel reveals a  $T_{dust}$ -unbiased selection of  $z \sim 2$  ultraluminous infrared galaxies", MNRAS, 409, 22 <http://adsabs.harvard.edu/abs/2010MNRAS.409...22M>
- Nguyen H.T.** et al. **2010**, "HerMES: The SPIRE confusion limit", A&A, 518, L5 <http://adsabs.harvard.edu/abs/2010A&A...518L...5N>
- O'Halloran B.** et al. **2010**, "Herschel photometric observations of the low metallicity dwarf galaxy NGC 1705", A&A, 518, L58 <http://adsabs.harvard.edu/abs/2010A&A...518L..58O>
- Oliver S.** et al. **2010**, "Specific Star Formation from  $0 < z < 2.4$  as seen in the Far-Infrared at 70 and 160  $\mu\text{m}$ ", MNRAS, 405, 2279 <http://adsabs.harvard.edu/abs/2010MNRAS.405.2279O>
- Oliver S.J.** et al. **2010**, "HerMES: SPIRE galaxy number counts at 250, 350 and 500 microns", A&A, 518, L21 <http://adsabs.harvard.edu/abs/2010A&A...518L..21O>
- Panuzzo P.** et al. **2010**, "Probing the molecular interstellar medium of M82 with Herschel-

SPIRE spectroscopy”, A&A, 518, L37 <http://adsabs.harvard.edu/abs/2010A&A...518L...37P>

**Pohlen M.** et al. **2010**, ”Radial distribution of gas and dust in the two spiral galaxies M99 and M100”, A&A, 518, L72 <http://adsabs.harvard.edu/abs/2010A&A...518L...72P>

**Rigopoulou D.** et al. **2010**, ”HerMES: Herschel-SPIRE observations of Lyman Break Galaxies”, MNRAS, 409, L7 <http://adsabs.harvard.edu/abs/2010MNRAS.409L...7R>

**Rodighiero G., Vaccari M.** et al. **2010**, ”MIR Luminosity Functions in the GOODS and VVDS-SWIRE Fields at  $0 < z < 2.5$ ”, A&A, 515, 8 <http://adsabs.harvard.edu/abs/2010A&A...515A...8R>

**Roseboom I.G.** et al. **2010**, ”The Herschel Multi-Tiered Extragalactic Survey: Source Extraction and Cross-Identifications in Confusion-Dominated SPIRE Images”, MNRAS, 409, 48 <http://adsabs.harvard.edu/abs/2010MNRAS.409...48R>

**Roussel H.** et al. **2010**, ”SPIRE imaging of M82: cool dust in the wind and tidal streams”, A&A, 518, L66 <http://adsabs.harvard.edu/abs/2010A&A...518L...66R>

**Rowan-Robinson M., Roseboom I.G., Vaccari M.** et al. **2010**, ”Cold dust and young starbursts : spectral energy distributions of Herschel SPIRE sources from the HerMES survey”, MNRAS, 409, 2 <http://adsabs.harvard.edu/abs/2010MNRAS.409...2R>

**Sauvage M.** et al. **2010**, ”The central region of spiral galaxies as seen by Herschel. M81, M99 and M100”, A&A, 518, L64 <http://adsabs.harvard.edu/abs/2010A&A...518L...64S>

**Schulz B.** et al. **2010**, ”HerMES: The Submillimeter Spectral Energy Distributions of Herschel/SPIRE-Detected Galaxies”, A&A, 518, L32 <http://adsabs.harvard.edu/abs/2010A&A...518L...32S>

**Serjeant S.** et al. **2010**, ”The AGN fraction of submm-selected galaxies and contributions to the submm/mm-wave extragalactic background light”, A&A, 514, 10 <http://adsabs.harvard.edu/abs/2010A&A...514A...10S>

**Vaccari M. & Franceschini A.** **2010**, ”Resolving the FIR/SMM Cosmic Background and thus Studying the High-Redshift Universe from Concordia Station”, Proceedings of the ARENA3 Conference, EAS Publications, 40, 429 <http://adsabs.harvard.edu/abs/2010EAS...40...429V>

**Vaccari M.** et al. **2010**, ”The HerMES SPIRE submillimeter local luminosity function”, A&A, 518, L20 <http://adsabs.harvard.edu/abs/2010A&A...518L...20V>

## 2011

**Afonso J.** et al. **2011**, ”Ultra Steep Spectrum radio sources in the Lockman Hole: SERVS identifications and redshift distribution at the faintest radio fluxes”, ApJ, 743, 122 <http://adsabs.harvard.edu/abs/2011ApJ...743..122A>

//adsabs.harvard.edu/abs/2011ApJ...743..122A

**Amblard A.** et al. **2011**, "Tracing the Sources of the Cosmic Far-Infrared Background with Unresolved Fluctuations", *Nature*, 470, 510 <http://adsabs.harvard.edu/abs/2011Natur.470..510A>

**Bracco A.** et al. **2011**, "Herschel-ATLAS: Statistical Properties of Galactic Cirrus in the GAMA-9 Hour Science Demonstration Phase Field", *MNRAS*, 412, 1151 <http://adsabs.harvard.edu/abs/2011MNRAS.412.1151B>

**Burgarella D.** et al. **2011**, HerMES : Lyman Break Galaxies individually detected at  $0.7 \leq z \leq 2.8$  in GOODS-N with Herschel/SPIRE, *ApJL*, 734, L12 <http://adsabs.harvard.edu/abs/2011ApJ...734L..12B>

**Conley A.** et al. **2011**, "Discovery of a Multiply Lensed Sub-Millimeter Galaxy In Early HerMES Herschel/SPIRE Data", *ApJL*, 732, L35 <http://adsabs.harvard.edu/abs/2011ApJ...732L..35C>

**Falder J.** et al. **2011**, "The Spitzer Extragalactic Representative Volume Survey (SERVS): The Environments of High- $z$  SDSS Quasi-Stellar-Objects", *ApJ*, 735, 123 <http://adsabs.harvard.edu/abs/2011ApJ...735..123F>

**Gavazzi R.** et al. **2011**, "Modeling of the HERMES J105751.1+573027 submillimeter source lensed by a dark matter dominated foreground group of galaxies", *ApJ*, 738, 125 <http://adsabs.harvard.edu/abs/2011ApJ...738..125G>

**Gonzalez-Solares E.** et al. **2011**, "Wide Field Optical Imaging on ELAIS N1, ELAIS N2, FLS and Lockman Hole: Observations and Source Catalogues", *MNRAS*, 416, 927 <http://adsabs.harvard.edu/abs/2011MNRAS.416..927G>

**MacKenzie T.** et al. **2011**, "A Pilot Study for the SCUBA-2 'All-Sky' Survey", *MNRAS*, 415, 1950 <http://adsabs.harvard.edu/abs/2011MNRAS.415.1950M>

**Omont A.** et al. **2011**, Observation of H<sub>2</sub>O in a strongly lensed Herschel-ATLAS source at  $z = 2.3$ , *A&A*, 530, L3, <http://adsabs.harvard.edu/abs/2011A&A...530L...30>

**Pascale E.** et al. **2011**, "The first release of data from the Herschel ATLAS : the SPIRE images", *MNRAS*, 415, 911 <http://adsabs.harvard.edu/abs/2011MNRAS.415..911P>

**Patel, H., Clements, D.L., Rowan-Robinson, M. & Vaccari, M.** **2011**, "Spectroscopic follow-up of 70  $\mu\text{m}$  sources in Spitzer Wide-area Infrared Extragalactic Legacy Survey", *MNRAS*, 415, 1738 <http://adsabs.harvard.edu/abs/2011MNRAS.415.1738P>

**Riechers D.A.** et al. **2011**, "Dynamical Structure of the Molecular Interstellar Medium in an Extremely Bright, Multiply Lensed  $z \simeq 3$  Submillimeter Galaxy Discovered with Herschel", *ApJL*, 733, L12 <http://adsabs.harvard.edu/abs/2011ApJ...733L..12R>

**Sacchi N.** et al. **2011**, "Herschel-SPIRE spectroscopy of nearby Seyfert galaxies", IAU Symposium 280, Poster 87, Session 2, <http://adsabs.harvard.edu/abs/2011IAUS...280P.322S>

**Scott K.S.** et al. **2011**, "Redshift Determination and CO Line Excitation Modeling for the Multiply-Lensed Galaxy HLSW-01", ApJ, 733, 29 <http://adsabs.harvard.edu/abs/2011ApJ...733...29S>

**Seymour N.** et al. **2011**, "HerMES: SPIRE Emission from Radio Selected AGN", MNRAS, 413, 1777 <http://adsabs.harvard.edu/abs/2011MNRAS.413.1777S>

**Symeonidis M.** et al. **2011**, "Herschel : The X-ray - Infrared correlation at  $z \sim 1$ ", MNRAS, 417, 2239 <http://adsabs.harvard.edu/abs/2011MNRAS.417.2239S>

**Valtchanov I.** et al. **2011**, "Physical conditions of the interstellar medium of high-redshift, strongly lensed submillimetre galaxies from the Herschel-ATLAS", MNRAS, 415, 3473 <http://adsabs.harvard.edu/abs/2011MNRAS.415.3473V>

**Wang L.** et al. **2011**, "HerMES detection of cosmic magnification of sub-mm galaxies using angular cross-correlation", MNRAS, 414, 596 <http://adsabs.harvard.edu/abs/2011MNRAS.414...596W>

**Wilson C.D** et al. **2011**, "The JCMT Nearby Galaxies Legacy Survey IV. Velocity Dispersions in the Molecular Interstellar Medium in Spiral Galaxies", MNRAS, 410, 1409 <http://adsabs.harvard.edu/abs/2011MNRAS.410.1409W>

## 2012

**Bethermin M.** et al. **2012**, "HerMES: deep number counts at 250, 350, and 500 microns in the COSMOS and GOODS-N fields and the build-up of the cosmic infrared background", A&A, 542, 58 <http://adsabs.harvard.edu/abs/2012A%26A...542A...58B>

**Bizzocchi L.** et al. **2012**, "Ultra Steep Spectrum Radio Sources in the Lockman Hole: SERVS Identifications and Redshift Distribution at the Faintest Radio Fluxes", Proceedings of Symposium 7 of JENAM 2010 "The Square Kilometre Array: Paving the way for the new 21st century radio astronomy paradigm", Astrophysics and Space Science Proceedings <http://adsabs.harvard.edu/abs/2012skap.book...97B>

**Ciesla L.** et al. **2012**, "SPIRE photometry of the Herschel Reference Survey", A&A, 543, 161 <http://adsabs.harvard.edu/abs/2012A%26A...543A.161C>

**De Bernardis P.** et al. **2012**, "Spectroscopic Active Galaxies and Clusters Explorer" <http://adsabs.harvard.edu/abs/2012mgm.conf.2133D> <http://arxiv.org/abs/1002.0867>

**Fotopoulou S.** et al. **2012**, "Photometry and Photometric Redshift catalogs for the Lockman Hole Deep Field", ApJS, 198, 1 <http://adsabs.harvard.edu/abs/2012ApJS..198...1F>

- Fritz J.** et al. **2012**, "The Herschel Exploitation of Local Galaxy Andromeda (HELGA). I: Global far-infrared and sub-mm morphology", *A&A*, 546, 34 <http://adsabs.harvard.edu/abs/2012A%26A...546A...34F>
- Mauduit J.-C.** et al. **2012**, "The Spitzer Extragalactic Representative Volume Survey (SERVS): Survey Definition and Goals", *PASP*, 124, 714 <http://adsabs.harvard.edu/abs/2012PASP...124...714M>
- Mitchell-Wynne K.** et al. **2012**, "HerMES: A Statistical Measurement of the Redshift Distribution of Herschel-SPIRE Sources Using the Cross-correlation Technique", *ApJ*, 753, 23 <http://adsabs.harvard.edu/abs/2012ApJ...753...23M>
- Oliver S.J.** et al. **2012**, "The Herschel Multi-tiered Extragalactic Survey: HerMES", *MNRAS*, 424, 1614 <http://adsabs.harvard.edu/abs/2012MNRAS.424.1614O>
- Page M.J.** et al. **2012**, "Suppression of star formation in powerful active galactic nuclei", *Nature*, 485, 213 <http://adsabs.harvard.edu/abs/2012Natur.485...213P>
- Pozzi F.** et al. **2012**, "The AGN content in luminous IR galaxies at  $z \sim 2$  from a global SED analysis including Herschel data", *MNRAS*, 423, 1909 <http://adsabs.harvard.edu/abs/2012MNRAS.423.1909P>
- Roseboom I.G.** et al. **2012**, "The Herschel Multi-Tiered Extragalactic Survey: SPIRE Properties of mm-selected sources in GOODS-N", *MNRAS*, 419, 2758 <http://adsabs.harvard.edu/abs/2012MNRAS.419.2758R>
- Smith A.J.** et al. **2012**, "HerMES: point source catalogues from deep Herschel-SPIRE observations", *MNRAS*, 419, 377 <http://adsabs.harvard.edu/abs/2012MNRAS.419...377S>
- Starikova S.** et al. **2012**, "Clustering of star-forming galaxies detected in mid-infrared with the Spitzer wide-area survey", *ApJ*, 751, 126 <http://adsabs.harvard.edu/abs/2012ApJ...751...126S>
- Wilson C.D.** et al. **2012**, "The JCMT Nearby Galaxies Legacy Survey VIII. CO data and the L(CO3-2)-L(FIR) correlation in the SINGS sample", *MNRAS*, 424, 3050 <http://adsabs.harvard.edu/abs/2012MNRAS.424.3050W>
- Xu C.K.** et al. **2012**, "Cosmic Evolution of Star-Formation Enhancement in Close Major-Merger Galaxy Pairs since  $z = 1$ ", *ApJ*, 760, 72 <http://adsabs.harvard.edu/abs/2012ApJ...760...72X>

## 2013

- Botticella M.T.** et al. **2013**, "SUDARE at the VST", *The Messenger*, 151, 29 <http://adsabs.harvard.edu/abs/2013Msngr.151...29B>
- Burgarella D.** et al. **2013**, "On the redshift evolution ( $0 \leq z \leq 4$ ) of dust attenuation and

of the total (UV+IR) star formation rate density”, *A&A*, 540, 70, <http://adsabs.harvard.edu/abs/2013A&A...554A..70B>

**Calanog J.A.** et al. **2013**, ”HerMES: The Far-Infrared Emission From Dust Obscured Galaxies”, *ApJ*, 775, 61 <http://adsabs.harvard.edu/abs/2013ApJ...775...61C>

**Feltre A.** et al. **2013**, ”The roles of star formation and AGN activity of IRS sources in the HerMES fields”, *MNRAS*, 434, 2426 <http://adsabs.harvard.edu/abs/2013MNRAS.434.2426F>

**Fu H.** et al. **2013**, ”The rapid assembly of an elliptical galaxy of 400 billion solar masses at a redshift of 2.3”, *Nature*, 498, 7454, 338 <http://adsabs.harvard.edu/abs/2013Natur.498..338F>

**Gruppioni C.** et al. **2013**, ”The Herschel PEP+HerMES Luminosity Function - I: Probing Evolution of PACS selected Galaxies up to  $z \simeq 4$ ”, *MNRAS*, 432, 23 <http://adsabs.harvard.edu/abs/2013MNRAS.432...23G>

**Lo Faro B., Franceschini A., Vaccari M.** et al. **2013**, ”The Complex Physics of Dusty Star-Forming Galaxies at High Redshifts as Revealed by Herschel and Spitzer”, *ApJ*, 762, 108 <http://adsabs.harvard.edu/abs/2013ApJ...762..108L>

**Madden S.** et al. **2013**, ”An Overview of the Dwarf Galaxy Survey”, *PASP*, 125, 600 <http://adsabs.harvard.edu/abs/2013PASP..125..600M>

**Patel H., Clements D.L., Vaccari M.** et al. **2013**, ”Evolution of the far-Infrared luminosity functions in the Spitzer Wide-area Infrared Extragalactic Legacy Survey”, *MNRAS*, 428, 291 <http://adsabs.harvard.edu/abs/2013MNRAS.428..291P>

**Randriamampandry, S.M.** et al. **2013**, ”Multi-wavelength Studies of Cluster Star Forming Galaxies at  $z \sim 0.54$ ”, *Proceedings of the International Astronomical Union*, 292, 337 <http://adsabs.harvard.edu/abs/2013IAUS..292..337R>

**Remy-Ruyer A.** et al. **2013**, ”Revealing the cold dust in low-metallicity environments: I - Photometry analysis of the Dwarf Galaxy Survey with Herschel”, *A&A*, 557, 95 <http://adsabs.harvard.edu/abs/2013A%26A...557A..95R>

**Rowan-Robinson M., Gonzalez-Solares E., Vaccari M. & Marchetti, L.** **2013**, ”Revised SWIRE photometric redshifts”, *MNRAS*, 428, 1958 <http://adsabs.harvard.edu/abs/2013MNRAS.428.1958R>

**Symeonidis M., Vaccari M.** et al. **2013**, ”The Herschel census of infrared SEDs through cosmic time”, *MNRAS*, 431, 2317 <http://adsabs.harvard.edu/abs/2013MNRAS.431.2317S>

**Viero M.** et al. **2013**, ”HerMES: Cosmic Infrared Background Anisotropies and the Clustering of Dusty Star-Forming Galaxies”, *ApJ*, 772, 77 <http://adsabs.harvard.edu/abs/>

2013ApJ...772...77V

**Viero M.** et al. **2013**, "HerMES: The Contribution to the Cosmic Infrared Background from Galaxies Selected by Mass and Redshift", ApJ, 779, 32 <http://adsabs.harvard.edu/abs/2013ApJ...779...32V>

**Wardlow J.L.** et al. **2013**, "HerMES: Candidate Gravitationally Lensed Galaxies and Lensing Statistics at Submillimeter Wavelengths", ApJ, 762, 59 <http://adsabs.harvard.edu/abs/2013ApJ...762...59W>

## 2014

**Ciesla L.** et al. **2014**, "Dust Spectral Energy Distributions of Nearby Galaxies: an Insight from the Herschel Reference Survey", A&A, 565, 128 <http://adsabs.harvard.edu/abs/2014A%26A...565A.128C>

**Clements D.L.** et al. **2014**, "HerMES: Clusters of Dusty Galaxies Uncovered by Herschel and Planck", MNRAS, 439, 1193 <http://adsabs.harvard.edu/abs/2014MNRAS.439.1193C>

**Cortese L.** et al. **2014**, "PACS photometry of the Herschel Reference Survey Far-infrared/submillimeter colours as tracers of dust properties in nearby galaxies", MNRAS, 440, 942 <http://adsabs.harvard.edu/abs/2014MNRAS.440..942C>

**Delvecchio I.** et al. **2014**, "Tracing the cosmic growth of super massive black holes to  $z \simeq 3$  with Herschel", MNRAS, 439, 2736 <http://adsabs.harvard.edu/abs/2014MNRAS.439.2736D>

**Dowell C.D.** et al. **2014**, "HerMES: Candidate High-Redshift Galaxies Discovered with Herschel/SPIRE", ApJ, 780, 75 <http://adsabs.harvard.edu/abs//2014ApJ...780...75D>

**Magdis G.** et al. **2014**, "A Far-Infrared Spectroscopic Survey of Intermediate Redshift (Ultra) Luminous Infrared Galaxies", ApJ, 796, 63 <http://adsabs.harvard.edu/abs/2014ApJ...796...63M>

**Rigopoulou D.** et al. **2014**, "Herschel Observations of Far-Infrared Cooling Lines in intermediate Redshift (Ultra)-luminous Infrared Galaxies", ApJ, 718, 15 <http://adsabs.harvard.edu/abs/2014ApJ...781L..15R>

**Rowan-Robinson M.** et al. **2014**, "Detailed modelling of a large sample of Herschel sources in the Lockman Hole: identification of cold dust and of lensing candidates through their anomalous SEDs", MNRAS, 445, 3848 <http://adsabs.harvard.edu/abs/2014MNRAS.445.3848R>

**Smith D.J.B.** et al. **2014**, "The temperature dependence of the far-infrared-radio correlation in the Herschel-ATLAS", MNRAS, 445, 2232 <http://adsabs.harvard.edu/abs/2014MNRAS.445.2232S>

**Symeonidis M.** et al. **2014**, "Linking the X-ray and infrared properties of star-forming galax-



ies at  $z < 1$ ", MNRAS, 443, 3728 <http://adsabs.harvard.edu/abs/2014MNRAS.443.3728S>

**Wang L.** et al. **2014**, "HerMES: Point source catalogues from Herschel-SPIRE observations II", MNRAS, 444, 2870 <http://adsabs.harvard.edu/abs/2014MNRAS.444.2870W>

## 2015

**Cappellaro E.** et al. **2015**, "Supernova rates from the SUDARE VST-OmegaCAM search. I. Rates per unit volume", A&A, 584, 62 <http://adsabs.harvard.edu/abs/2015A%26A...584A..62C>

**De Cicco D.** et al. **2015**, "Variability-selected Active Galactic Nuclei in the VST-SUDARE/VOICE Survey of the COSMOS Field", A&A, 574, 112 <http://adsabs.harvard.edu/abs/2015A%26A...574A.112D>

**Falocco S.** et al. **2015**, "SUDARE-VOICE variability-selection of Active Galaxies in the Chandra Deep Field South and the SERVS/SWIRE region", A&A, 579, 115 <http://adsabs.harvard.edu/abs/2015A%26A...579A.115Fc>

**Gruppioni C.** et al. **2015**, "Star Formation in Herschel's Monsters versus Semi-Analytic Models", MNRAS, 451, 3419 <http://adsabs.harvard.edu/abs/2015MNRAS.451.3419G>

**Jarvis M.J.** et al. **2015**, "The star-formation history of the Universe with the SKA", Proceedings of Advancing Astrophysics with the Square Kilometre Array (AASKA14). 9 -13 June, 2014. Giardini Naxos, Italy <http://adsabs.harvard.edu/abs/2015aska.confE..68J>

**Johnston R., Vaccari, M.** et al. **2015**, "The evolving relation between star-formation rate and stellar mass in the VIDEO Survey since  $z=3$ ", MNRAS, 453, 2540 <http://adsabs.harvard.edu/abs/2015MNRAS.453.2540J>

**Luchsinger K.** et al. **2015**, "The host galaxies of micro-Jansky radio sources", ApJ, 150, 87 <http://adsabs.harvard.edu/abs/2015AJ....150...87L>

**Ma B.** et al. **2015**, "Spitzer Imaging of Strongly-Lensed Herschel-Selected Dusty Star Forming Galaxies", ApJ, 814, 17 <http://adsabs.harvard.edu/abs/2015ApJ...814...17M>

**McAlpine K.** et al. **2015**, "The SKA view of the Interplay between SF and AGN Activity and its role in Galaxy Evolution", Proceedings of Advancing Astrophysics with the Square Kilometre Array (AASKA14). 9 -13 June, 2014. Giardini Naxos, Italy <http://adsabs.harvard.edu/abs/2015aska.confE..83M>

**Randriamampandry S.M.** et al. **2015**, "The Far-Infrared-Radio Correlation in MS0415-03", MNRAS, 447, 168 <http://adsabs.harvard.edu/abs/2015MNRAS.447..168R>

**Rawlings J.I.** et al. **2015**, "HerMES: Disentangling active galactic nuclei and star formation in the radio source population", MNRAS, 452, 4111 <http://adsabs.harvard.edu/abs/2015MNRAS.452.4111R>

**Smolcic V. et al. 2015**, "Exploring AGN Activity over Cosmic Time with the SKA", Proceedings of Advancing Astrophysics with the Square Kilometre Array (AASKA14). 9 -13 June, 2014. Giardini Naxos, Italy <http://adsabs.harvard.edu/abs/2015aska.confE..69S>

**Vaccari M. 2015**, "HELP-ing Extragalactic Surveys : The Herschel Extragalactic Legacy Project & The Coming of Age of Multi-Wavelength Astrophysics", Proceedings of the SALT Science Conference 2015, 1-5 June 2015, Stellenbosch, South Africa, PoS, 250, 17 <http://adsabs.harvard.edu/abs/2015salt.confE..17V>

**Vaccari M. 2015**, "The Spitzer Data Fusion : Contents, Construction and Applications to Galaxy Evolution Studies", Proceedings of the Conference "The Many Facets of Extragalactic Radio Surveys : Towards New Scientific Challenges", 20-23 October 2015, Bologna, Italy, PoS, 267, 27 <http://adsabs.harvard.edu/abs/2015fers.confE..27V>

**Whittam I. et al. 2015**, "The faint radio source population at 15.7 GHz – II. Multi-wavelength properties", MNRAS, 453, 4244 <http://adsabs.harvard.edu/abs/2015MNRAS.453.4244W>

## 2016

**Baronchelli I. et al. 2016**, "The Spitzer-IRAC/MIPS Extragalactic Survey (SIMES) in the South Ecliptic Pole field", ApJS, 223, 1 <http://adsabs.harvard.edu/abs/2016ApJS..223...1B>

**Botticella M.T. et al. 2016**, "First Results from Supernova Diversity and Rate Evolution (SUDARE) Survey at VST", Proceedings of the "The Universe of Digital Sky Surveys" Conference, 25-28 November 2014, Naples, Italy, Astrophysics and Space Science Proceedings, Volume 42, Chapter 31, Page 197 <http://adsabs.harvard.edu/abs/2016ASSP...42..197B>

**De Cicco D. et al. 2016**, "Variability-Selected AGNs in the VST-SUDARE Survey of the COSMOS Field", Proceedings of the "The Universe of Digital Sky Surveys" Conference, 25-28 November 2014, Naples, Italy, Astrophysics and Space Science Proceedings, Volume 42, Chapter 42, Page 269 <http://adsabs.harvard.edu/abs/2016ASSP...42..269D>

**Duivenvoorden S. et al. 2016**, "HELP: star formation as function of galaxy environment with Herschel", MNRAS, 462, 277 <http://adsabs.harvard.edu/abs/2016MNRAS.462..277D>

**Falocco S. et al. 2016**, "A New Search for Variability-Selected Active Galaxies Within the VST SUDARE-VOICE Survey: The Chandra Deep Field South and the SERVS-SWIRE Area", Proceedings of the "The Universe of Digital Sky Surveys" Conference, 25-28 November 2014, Naples, Italy, Astrophysics and Space Science Proceedings, Volume 42, Chapter 43, Page 275 <http://adsabs.harvard.edu/abs/2016ASSP...42..275F>

**Gaia Collaboration et al. 2016**, "The Gaia Mission", A&A, 595, A1 <http://adsabs.harvard.edu/abs/2016A%26A...595A...1G>

**Gaia Collaboration et al. 2016**, "Gaia Data Release 1. Summary of the astrometric, pho-

tometric, and survey properties”, A&A, 595, A2 <http://adsabs.harvard.edu/abs/2016A%26A...595A...2G>

**Hatfield P.W.** et al., **2016**, ”The galaxy-halo connection in the VIDEO Survey at  $0.5 < z < 1.7$ ”, MNRAS, 459, 2618 <http://adsabs.harvard.edu/abs/2016MNRAS.459.2618H>

**Laigle C.** et al. **2016**, ”The COSMOS2015 Catalog: Exploring the  $1 < z < 6$  Universe with half a million galaxies”, ApJ, 224, 24 <http://adsabs.harvard.edu/abs/2016ApJS...224...24L>

**Marchetti L., Vaccari, M.** et al. **2016**, ”The HerMES sub-millimetre local and low-redshift luminosity functions”, MNRAS, 456, 1999 <http://adsabs.harvard.edu/abs/2016MNRAS.456.1999M>

**Marchetti L., Vaccari, M. & Franceschini, A.** **2016**, ”The HerMES Local Luminosity Function”, Proceedings of the International Astronomical Union, 315, 52 <http://adsabs.harvard.edu/abs/2016IAUS...315E...52M>

**Nayyeri, H.** et al., **2016**, ”Candidate Gravitationally Lensed Dusty Star-forming Galaxies in the Herschel Wide Area Surveys”, ApJ, 823, 17 <http://adsabs.harvard.edu/abs/2016ApJ...823...17N>

**Rowan-Robinson M.** et al. **2016**, ”The star-formation rate density from  $z = 1 - 6$ ”, MNRAS, 461, 1100 <http://adsabs.harvard.edu/abs/2016MNRAS.461.1100R>

**Vaccari M.** **2016**, ”HELP : The Herschel Extragalactic Legacy Project & The Coming of Age of Multi-Wavelength Astrophysics”, Proceedings of the ”The Universe of Digital Sky Surveys” Conference, 25-28 November 2014, Naples, Italy, Astrophysics and Space Science Proceedings, Volume 42, Chapter 10, Page 71 <http://adsabs.harvard.edu/abs/2016ASSP...42...71V>

## 2017

**Botticella M.T.** et al. **2017**, ”Supernova rates from the SUDARE VST-Omegacam search II. Rates in a galaxy sample”, A&A, 598, 50 <http://adsabs.harvard.edu/abs/2017A%26A...598A...50B>

**Gaia Collaboration** et al. **2017**, ”Gaia Data Release 1. Open cluster astrometry: performance, limitations, and future prospects”, A&A, in press <http://arxiv.org/abs/1703.01131>

**Hurley P.D.** et al. **2017**, ”HELP: XID+, The Probabilistic De-blender for Herschel SPIRE maps”, MNRAS, 464, 885 <http://adsabs.harvard.edu/abs/2017MNRAS.464...885H>

**Negrello M.** et al. **2017**, ”The Herschel-ATLAS: a sample of 500- $\mu$ m-selected lensed galaxies over 600 square degrees”, MNRAS, 465, 3558 <http://adsabs.harvard.edu/abs/2017MNRAS.465.3558N>

**Nettke W.** et al. **2017**, "The SCUBA-2 Ambitious Sky Survey: a catalogue of beam-sized sources in the Galactic longitude range  $120^\circ$  to  $140^\circ$ ", MNRAS, in press <http://arxiv.org/abs/1703.01930>

**Ocran E.F., Taylor A.R., Vaccari M. & Green D.A.** **2017**, "The Nature of the Faint Low-Frequency Radio Source Population", MNRAS, in press <http://arxiv.org/abs/1702.04962>

## **Theses**

**Vaccari M.** **2000**, MSc Thesis, Department of Physics, University of Padova, "Gaia Galaxy Survey : Simulated Observations of Galaxies with ESA GAIA Satellite"

**Vaccari M.** **2004**, PhD Thesis, Department of Astronomy, University of Padova, "Space Infrared Extragalactic Surveys : Results from ISO and Future Prospects"