Isabella Lamperti

PERSONAL DETAILS

Address European Southern Observatory

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Languages: Italian (mother tongue), English (fluent), German (conversational),

French (basic)

Citizenship: Swiss, Italian

EDUCATION & RESEARCH EXPERIENCE

Ph.D. Studentship (1 year), European Southern Observatory, Germany Sept. 2019-present

Supervisor: Dr. Vincenzo Mainieri

Project Title: Integrated and spatially resolved dust properties of AGN hosts at $z\sim 2$

Ph.D. in Astrophysics, University College London, UK

Nov. 2016-present

Supervisor: Dr. Amélie Saintonge

Thesis Title: Dust properties of nearby galaxies

Research Project, Swinburne University of Technology, Australia Aug.-Oct. 2016

Supervisor: Dr. Deanne Fisher and Prof. Karl Glazebrook

Project Title: Ages of massive star forming clumps in turbulent disks from $H\alpha$ equivalent widths in the

DYNAMO survey

M.Sc. in Physics, ETH Zürich, Switzerland 2014-2016

Supervisors: Dr. Michael Koss and Prof. Kevin Schawinski

Thesis Title: Near-infrared spectroscopy of nearby hard X-ray selected AGN

B.Sc. in Physics, ETH Zürich, Switzerland 2010-2014

Supervisors: Dr. Michael Koss and Prof. Kevin Schawinski

 $\label{thm:measurement} \mbox{Project Title: } \textit{Measurement of the accretion rate of nearby hard X-ray selected AGN using optical } \\$

spectroscopy

TEACHING

Marking of Physics exercises, University College London 2017-2019

Introduction to Astronomy, Atomic Physics

Teaching Assistant at the Department of Mathematics, ETH Zürich 2013-2016

Mathematics I and II for architects

SEMINARS AND TALKS

University College London, London, UK, Lunch talk	Jan. 2019
University of Central Lancashire, Preston, UK, Departement seminar	Dec. 2018
University of Southampton, Southampton, UK, Lunch talk	May 2017
Durham University, Durham, UK, Lunch talk	March 2017
University of Cambridge, Cambridge, UK, Talk at the X-ray bunclub	Feb. 2017

CONFERENCES ATTENDED

Dusting the Universe, Tucson, AZ, USA

March 2019

Contributed talk: Dust properties of nearby galaxies from the JINGLE survey inferred from hierarchical Bayesian SED fitting

The Laws of Star-Formation, Cambridge, UK

July 2018

Poster presentation

KIAA Forum of Gas in Galaxies, Peking University, China

June 2018

Poster presentation

European Week of Astronomy and Space Science (EWASS), Liverpool, UK

April 2018

Poster presentation

Elusive AGN in the Next Era, Fairfax, VA, USA

June 2017

Contributed talk: Near-infrared spectroscopy of nearby hard X-ray selected AGN

OBSERVING EXPERIENCE

JCMT: 10 nights SCUBA-2 and RxA observations for the JINGLE survey (2017-2018)

IRAM 30m telescope: seven nights CO spectroscopy for the xCOLD GASS survey (2017), seven nights continuum observations during NIKA-2 observing pool week (2018).

ACCEPTED PROPOSALS

IRAM 30m/NIKA-2: as P.I., Title: Characterizing the millimeter emission in nearby galaxies with NIKA-2, 20.9 hours, 2018

Magellan/FIRE: P.I.: E. Treister, Title: The BASS is on FIRE: Near-IR Spectroscopy of hard-X selected AGN in the local Universe, 1 night, 2018

VLT: P.I.: K. Oh, Title: Completing A Census of Black Hole Accretion Rates in the Local Universe through Optical Spectroscopy, VLT, 31 hours of FORS2 and 37 hours of XSHOOTER, filler program, 2016

PROGRAMMING SKILLS

Python, LATEX, C++ (basic), Softwares: pPXF, PyStan, emcee

AWARDS AND GRANTS

Royal Astronomical Society Travel Grant, £660

2018

Swiss Society for Astrophysics and Astronomy (SSAA) Travel Grant for young scientist, £680 2017

OTHERS

Organizer of the Lunch Talks of the Astronomy group at UCL

Spring semester 2019

PUBLICATIONS

Summary as of 26/10/2019 according to ADS:

Number of refereed publications: 21

Number of refereed publications as first author: 2

Refereed citations: 318

h-index: 12

Submitted papers

1. The CO(3-2)/CO(1-0) luminosity line ratio in nearby star-forming galaxies and AGN from xCOLD GASS, BASS and SLUGS

Lamperti, I., Saintonge, A., Koss, M., Viti, S., Wilson, D. C., He, H., Shimizu, T., Greve, T., Kramer, C., Mushotzky, R., Sanders, D., Schawiski, K., Tacconi, L. J., and Treister, E. submitted to ApJ, link to the paper draft:

https://drive.google.com/open?id=1 NspbL4 grHlFaeXHZQsYYuhukrBImN3 UEAU SpbL4 grHlFaeXHZQsYYUhukrBIm

List of publications

First-author papers:

 JINGLE V: Dust properties of nearby galaxies derived from hierarchical Bayesian SED fitting Lamperti, I., Saintonge, A., De Looze, I., Accurso, A., Smith, M. W. L., Clark, C.J. R., Wilson, C. D., Xiao, T., Hwang, H. S., Lin, L., Sargent, M., Bureau, M., Brinks, E., Clements, D. L., Eales, S., Williams, T. G., Brown, T., Yang, C., Michaowski, M. J., Lee, J. C., and Glass, D. H. W.

Monthly Notices of the Royal Astronomical Society, in press (2019), arXiv.....

1. BAT AGN Spectroscopic Survey - IV: Near-Infrared Coronal Lines, Hidden Broad Lines, and Correlation with Hard X-ray Emission.

Lamperti, I., Koss, M., Trakhtenbrot, B., Schawinski, K., Ricci, C., Oh, K., Landt, H., Riffel, R., Rodr guez-Ardila, A., Gehrels, N., Harrison, F., Masetti, N., Mushotzky, R., Treister, E., Ueda, Y., and Veilleux, S..

Monthly Notices of the Royal Astronomical Society, 467, 540-572 (2017)

Other publications:

19. BAT AGN Spectroscopic Survey - XIII. The nature of the most luminous obscured AGN in the low-redshift universe

Bär, R. E., Trakhtenbrot, B., Oh, K., Koss, M. J., Wong, O. I., Ricci, C., Schawinski, K., Weigel, A. K., Sartori, L.F., Ichikawa, K., Secrest, N. J., Stern, D., Pacucci, F., Mushotzky, R., Powell, M. C.; Ricci, F., Sani, E., Smith, K. L., Harrison, F. A., **Lamperti, I.**, Urry, M.C. Monthly Notices of the Royal Astronomical Society, in press. (2019), arXiv:1908.07546

18. BAT AGN Spectroscopic Survey. XVI. General Physical Characteristics of BAT Blazars
Paliya, Vaidehi S., Koss, M., Trakhtenbrot, B., Ricci, C., Oh, K., Ajello, M., Stern, D., Powell,
M. C., Urry, C. M., Harrison, F., Lamperti, I., Mushotzky, R., Marcotulli, L., Mejìa-Restrepo,
J., Hartmann, D.

The Astrophysical Journal, 881, 154 (2019)

17. JINGLE, a JCMT legacy survey of dust and gas for galaxy evolution studies - II. SCUBA-2 850µm data reduction and dust flux density catalogues

Smith, M. W. L., Clark, C. J. R., De Looze, I., Lamperti, I., Saintonge, A., Wilson, C. D., Accurso, G., Brinks, E., Bureau, M., Chung, E. J., Cigan, P. J., Clements, D. L., Dharmawardena, T., Fanciullo, L., Gao, Y., Gao, Y., Gear, W. K., Gomez, H. L., Greenslade, J., Hwang, H. S., Kemper, F., Lee, J. C., Li, C., Lin, L., Liu, L., Molnr, D. C., Mok, A., Pan, H., Sargent, M., Scicluna, P., Smith, C. M. A., Urquhart, S., Williams, T. G., Xiao, T., Yang, C., Zhu, M. Monthly Notices of the Royal Astronomical Society, 486(3), 4166-4185 (2019)

- NuSTAR and Keck Observations of Heavily Obscured Quasars Selected by WISE
 Yan, W., Hickox, R. C., Hainline, K. N., Stern, D., Lansbury, G., Alexander, D. M., Hviding, R. E., Roberto J. Assef, R. J., Ballantyne, D. R., Dipompeo, M. A., Lanz, L., Carroll, C. M., Koss, M., Lamperti, I., Civano, F., Del Moro, A., Gandhi, P., and Myers, A. D. The Astrophysical Journal, 870, 33 (2019)
- JINGLE, a JCMT legacy survey of dust and gas for galaxy evolution studies I. Survey overview and first results.
 Saintonge, A., Wilson, C. D., Xiao, T., Lin, L., Hwang, H. S., Tosaki, T., Bureau, M., Cigan, P. J., Clark, C. J. R., Clements, D. L., De Looze, I., Dharmawardena, T., Gao, Y., Gear, W. K., Greenslade, J., Lamperti, I., Lee, J. C., Li, C., Michalowski, M. J., Mok, A., Pan, H.-A., Sansom, A. E., Sargent, M., Smith, M. W. L., Williams, T., Yang, C., Zhu, M., Accurso, G., Barmby, P., Brinks, E., Bourne, N., Brown, T., Chung, A., Chung, E. J., Cibinel, A., Coppin, K., Davies, J., Davis, T. A., Eales, S., Fanciullo, L., Fang, T., Gao, Y., Glass, D. H. W., Gomez, H. L., Greve, T., He, J., Ho, L. C., Huang, F., Jeong, H., Jiang, X., Jiao, Q., Kemper, F., Kim, J. H., Kim, M., Kim, T., Ko, J., Kong, X., Lacaille, K., Lacey, C. G., Lee, B., Lee, J. H., Lee, W.-K., Masters, K., Oh, S.-H., Papadopoulos, P., Park, C., Park, S.-J., Parsons, H., Rowlands, K., Scicluna, P., Scudder, J. M., Sethuram, R., Serjeant, S., Shao, Y., Sheen, Y.-K., Shi, Y., Shim, H., Smith, C. M. A., Spekkens, K., Tsai, A.-L., Verma, A., Urquhart, S., Violino, G., Viti, S., Wake, D., Wang, J., Wouterloot, J., Yang, Y., Yim, K., Yuan, F., and Zheng, Z.
 Monthly Notices of the Royal Astronomical Society, 481(3), 3497-3519 (2018)
- 14. BAT AGN Spectroscopic Survey XII. The relation between coronal properties of active galactic nuclei and the Eddington ratio.
 Ricci, C., Ho, L. C., Fabian, A. C., Trakhtenbrot, B., Koss, M. J., Ueda, Y., Lohfink, A., Shimizu, T., Bauer, F. E., Mushotzky, R., Schawinski, K., Paltani, S., Lamperti, I., Treister, E., and Oh, K.
 Monthly Notices of the Royal Astronomical Society, 480, 1819-1830 (2018)
- 13. BAT AGN Spectroscopic Survey. VIII. Type 1 AGN with Massive Absorbing Columns.

 Shimizu, T. T., Davies, R. I., Koss, M., Ricci, C., Lamperti, I., Oh, K., Schawinski, K.,

 Trakhtenbrot, B., Burtscher, L., Genzel, R., Lin, M.-y., Lutz, D., Rosario, D., Sturm, E., and
 Tacconi, L. .

 The Astrophysical Journal, 856, 154 (2018)
- xCOLD GASS: The Complete IRAM 30 m Legacy Survey of Molecular Gas for Galaxy Evolution Studies.
 Saintonge, A., Catinella, B., Tacconi, L. J., Kauffmann, G., Genzel, R., Cortese, L., Dav e, R., Fletcher, T. J., Graci a-Carpio, J., Kramer, C., Heckman, T. M., Janowiecki, S., Lutz, K., Rosario, D., Schiminovich, D., Schuster, K., Wang, J., Wuyts, S., Borthakur, S., Lamperti, I., and Roberts- Borsani, G. W..
 The Astrophysical Journal Supplement Series, 233, 22 (2017)
- 11. BAT AGN Spectroscopic Survey V. X-Ray Properties of the Swift/BAT 70-month AGN Catalog. Ricci, C., Trakhtenbrot, B., Koss, M. J., Ueda, Y., Del Vecchio, I., Treister, E., Schawinski, K., Paltani, S., Oh, K., **Lamperti, I.,** Berney, S., Gandhi, P., Ichikawa, K., Bauer, F. E., Ho, L. C., Asmus, D., Beckmann, V., Soldi, S., Balokovic, M., Gehrels, N., and Markwardt, C. B. The Astrophysical Journal Supplement Series, 233, 17 (2017a)
- BAT AGN Spectroscopic Survey I. Spectral Measurements, Derived Quantities, and AGN Demographics.
 Koss, M., Trakhtenbrot, B., Ricci, C., Lamperti, I., Oh, K., Berney, S., Schawinski, K., Balokovic, M., Baronchelli, L., Crenshaw, D. M., Fischer, T., Gehrels, N., Harrison, F., Hashimoto, Y., Hogg, D., Ichikawa, K., Masetti, N., Mushotzky, R., Sartori, L., Stern, D., Treister, E., Ueda, Y., Veilleux, S., and Winter, L.
 The Astrophysical Journal, 850(1),74 (2017)
- 9. The close environments of accreting massive black holes are shaped by radiative feedback. Ricci, C., Trakhtenbrot, B., Koss, M. J., Ueda, Y., Schawinski, K., Oh, K., Lamperti, I.,

Mushotzky, R., Treister, E., Ho, L. C., Weigel, A., Bauer, F. E., Paltani, S., Fabian, A. C., Xie, Y., and Gehrels, N.

Nature, 549(7), 488-491 (2017b)

- BAT AGN Spectroscopic Survey (BASS) VI. The Γ_X L/L_{Edd} relation.
 Trakhtenbrot, B., Ricci, C., Koss, M. J., Schawinski, K., Mushotzky, R., Ueda, Y., Veilleux, S.,
 Lamperti, I., Oh, K., Treister, E., Stern, D., Harrison, F., Balokovic, M., and Gehrels, N..
 Monthly Notices of the Royal Astronomical Society, 470(1), 800-814 (2017)
- 7. The NuSTAR Serendipitous Survey: Hunting for the Most Extreme Obscured AGN at > 10 keV. Lansbury, G. B., Alexander, D. M., Aird, J., Gandhi, P., Stern, D., Koss, M., Lamperti, I., Ajello, M., Annuar, A., Assef, R. J., Ballantyne, D. R., Balokovic, M., Bauer, F. E., Brandt, W. N., Brightman, M., Chen, C. T. J., Civano, F., Comastri, A., Del Moro, A., Fuentes, C., Harrison, F. A., Marchesi, S., Masini, A., Mullaney, J. R., Ricci, C., Saez, C., Tomsick, J. A., Treister, E., Walton, D. J., and Zappacosta, L. .

The Astrophysical Journal, 846(1), 20 (2017)

- 6. The weak Fe fluorescence line and long-term X-ray evolution of the Compton-thick active galactic nucleus in NGC 7674.
 - Gandhi, P., Annuar, A., Lansbury, G. B., Stern, D., Alexander, D. M., Bauer, F. E., Bianchi, S., Boggs, S. E., Boorman, P. G., Brandt, W. N., Brightman, M., Christensen, F. E., Comastri, A., Craig, W. W., Del Moro, A., Elvis, M., Guainazzi, M., Hailey, C. J., Harrison, F. A., Koss, M., Lamperti, I., Malaguti, G., Masini, A., Matt, G., Puccetti, S., Ricci, C., Rivers, E., Walton, D. J., and Zhang, W. W..

Monthly Notices of the Royal Astronomical Society, 467, 4606-4621 (2017)

- 5. BAT AGN Spectroscopic Survey III. An observed link between AGN Eddington ratio and narrow-emission-line ratios.
 - Oh, K., Schawinski, K., Koss, M., Trakhtenbrot, B., **Lamperti, I.**, Ricci, C., Mushotzky, R., Veilleux, S., Berney, S., Crenshaw, D. M., Gehrels, N., Harrison, F., Masetti, N., Soto, K. T., Stern, D., Treister, E., and Ueda, Y..

Monthly Notices of the Royal Astronomical Society, 464, 1466-1473 (2017)

- 4. Determining the radio active galactic nuclei contribution to the radio-far-infrared correlation using the black hole Fundamental Plane relation.
 - Wong, O. I., Koss, M. J., Schawinski, K., Kapińska, A. D., **Lamperti, I.**, Oh, K., Ricci, C., Berney, S., and Trakhtenbrot, B..

Monthly Notices of the Royal Astronomical Society, 460, 1588-1597 (2016)

3. NuSTAR Resolves the First Dual AGN above 10 keV in SWIFT J2028.5+2543.

Koss, M. J., Glidden, A., Balokovic, M., Stern, D., Lamperti, I., Assef, R., Bauer, F., Ballantyne, D., Boggs, S. E., Craig, W. W., Farrah, D., Fu rst, F., Gandhi, P., Gehrels, N., Hailey, C. J., Harrison, F. A., Markwardt, C., Masini, A., Ricci, C., Treister, E., Walton, D. J., and Zhang, W. W.

The Astrophysical Journal Letters, 824, L4 (2016b)

- 2. A New Population of Compton-thick AGNs Identified Using the Spectral Curvature above 10 keV. Koss, M. J., Assef, R., Balokovic, M., Stern, D., Gandhi, P., Lamperti, I., Alexander, D. M., Ballantyne, D. R., Bauer, F. E., Berney, S., Brandt, W. N., Comastri, A., Gehrels, N., Harrison, F. A., Lansbury, G., Markwardt, C., Ricci, C., Rivers, E., Schawinski, K., Trakhtenbrot, B., Treister, E., and Urry, C. M. The Astrophysical Journal, 825(2), 85 (2016a)
- 1. BAT AGN spectroscopic survey-II. X-ray emission and high-ionization optical emission lines. Berney, S., Koss, M., Trakhtenbrot, B., Ricci, C., **Lamperti, I.**, Schawinski, K., Balokovic, M., Crenshaw, D. M., Fischer, T., Gehrels, N., Harrison, F., Hashimoto, Y., Ichikawa, K., Mushotzky, R., Oh, K., Stern, D., Treister, E., Ueda, Y., Veilleux, S., and Winter, L.. Monthly Notices of the Royal Astronomical Society, 454, 3622-3634 (2015)