Michele Fumagalli

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Scientific Interests

Gas flows around galaxies, galaxy formation and evolution, the role of environment, absorption line systems, physics of the interstellar medium, star formation, stellar initial mass function.

Academic History

2020 **Professor**, *University of Milano Bicocca*.
2018 **Professor**, *Durham University*.
2017 **Associate Professor (Reader)**, *Durham University*.
2014 **Assistant Professor (Lecturer)**, *Durham University*.
2013 **Postdoctoral Fellow**, *Carnegie Observatories, Princeton University*.

Education

2016 **Postgraduate Certificate in Academic Practice**, *Durham University, UK*.
2012 **Ph.D. in astrophysics**, *University of California, Santa Cruz, USA*.
2010 **Master in astrophysics**, *University of California, Santa Cruz, USA*.
2008 **Laurea specialistica (MSc)**, *University of Milano Bicocca, Italy*.
2006 **Laurea triennale (BSc)**, *University of Milano Bicocca, Italy*.

Selected Awards and Fellowships

2017 **Abilitazione Nazionale Italiana**, *Professore Associato e Ordinario*.
2015 **Fellow of the Higher Education Academy**.
2014-2015 **Carnegie Visiting Associate**, Carnegie Observatories.
Visiting fellowship at Carnegie Observatories.
2012 **Lyman Spitzer Fellowship**, Princeton University.
Postdoctoral fellowship in theoretical astrophysics.
2012 **Carnegie-Princeton Fellowship**, Carnegie Observatories, Princeton University.
Postdoctoral fellowship in observational astrophysics.
2012 **Hubble Fellowship**, Carnegie Observatories.
Awarded to highly qualified recent postdoctoral scientists to conduct independent research.

2012 **CfA Fellowship**, (declined), The Harvard-Smithsonian Center for Astrophysics.
Awarded to an outstanding researcher displaying significant promise in theory or observation.

2012 **Miller Research Fellowship**, (declined), University of California, Berkeley.
Awarded to exceptional young scientists of great promise.

2011 **Price Prize in Cosmology and AstroParticle Physics**, CCAPP, Ohio State University.
Awarded in recognition of research excellence in cosmology and astro-particle physics.

2011 **Chancellor's Dissertation Year Fellowship**, UCSC.
Awarded based on the academic achievement of the nominee.

2010 **Whitford Prize**, Department of Astronomy, UCSC.
Awarded for outstanding performance during the first and second years.

2008 **Regents' fellowship**, UCSC.
Awarded to promising first-year graduate students.

Grant History

2020 **Durham Astronomy Consolidated Grant**, STFC, (Project co-PI).

2019 **NASA grant**, HST-GO-15637, (Science Co-PI).

2018 **ERC Attrattività**, Fondazione Cariplo, (PI).

2017 **ERC Starting Grant**, ERC, (PI).

2017 **Durham Astronomy Consolidated Grant**, STFC, (Project PI).

2015 **NASA grant**, HST-GO-14127, (Science PI).

2012 **NASA Hubble Fellowship**, grant HF-51305.01-A, (PI).

2010 **HIPACC grant**, University California, (PI).

Talks and Seminars

Dec., 2019 **Joint Astronomy Colloquium**, *MPA-MPE-ESO*, invited.
Shedding light on gas around galaxies across cosmic times

Oct., 2019 **CGM in Berlin 2019**, *Max Planck Society*, invited.
Gas around galaxies at $z \sim 2-3$: linking emission and absorption with large surveys

Jun., 2019 **What Matter(s) Between Galaxies**, *Abbazia di Spineto*, SOC.
Gas around galaxies: connecting emission and absorption with large surveys

Mar., 2019 **Astronomy Seminar**, *Nottingham University*, invited.
Shedding light on gas around galaxies across cosmic time

Dec., 2018 **Twenty years of science at Bicocca**, *Milano-Bicocca University*, invited review.
Astrophysics ± 20: Deeper, Sharper, and Bigger

Nov., 2018 **CASTOR UV space observatory**, *The Royal Observatory Edinburgh*, invited review.
The galaxy-IGM connection

Jun., 2017 **What Matter(s) Around Galaxies**, *Durham University*, SOC/LOC co-chair.
Probing the gaseous environment of star-forming galaxies in absorption and emission

Apr., 2017 **Seminar, Department of Physics**, *University of Milano-Bicocca*, invited.
MUS(E)ing over gas flows as drivers of galaxy evolution

May., 2016 **Cavendish Astrophysics Seminar**, *University of Cambridge*, invited.
Gas flows as fuel for star formation: a spotlight on strong absorption line systems

Apr., 2016 **Astronomy Seminar**, *ETH Zurich*, invited.
Gas flows as fuel for star formation: a spotlight on strong absorption line systems

Mar., 2016 **Astronomy Seminar**, *Stockholm University*, invited.
Gas flows as fuel for star formation: a spotlight on strong absorption line systems

Sep., 2015 **Astronomy Seminar**, *INAF/Trieste*, invited.
Gas flows as fuel for star formation: a spotlight on strong absorption line systems

Jun., 2015 **IGM@50**, *INAF/Firenze*, invited.
Probing gas flows near galaxies: a spotlight on Lyman Limit Systems

Jun., 2014 **Intergalactic Matters**, *MPIA, Heidelberg*, invited.
A shot in the dark: the star formation rates of DLAs at $z \sim 2-3$

Apr., 2014 **Colorful galaxies: a conference for Peppo Gavazzi's birthday**, *Como, Italy*, invited.
Can we use Hα to trace star formation rates?

Apr., 2014 **Exploiting VST ATLAS... and its sister surveys**, *Durham University*, invited.
ATLAS search for Lyman Limit Systems in quasar pairs.

Mar., 2014 **Astronomy Friday Lunch Talks**, *Durham University*.
The importance of stochastic effects in stellar population synthesis.

Jan., 2014 **DEX meeting**, *Durham University*.
Investigations on the gaseous environment of distant galaxies.

Dec., 2013 **TAPIR seminar**, *Caltech*, invited.
Investigations on the gaseous environment of distant galaxies.

Oct., 2013 **Metal Production and Distribution in a Hierarchical Universe**, *Rencontres de l'Observatoire de Paris 2013 - ESO Workshop*, invited review.
IGM abundances in the high-redshift universe.

Aug., 2013 **Santa Cruz Galaxy Workshop**, *UCSC*.
Lyman limit systems and the circumgalactic medium at $z \sim 2-3$.

Jun., 2013 **Intergalactic Interactions**, *Higgs Centre, Edinburgh*, invited.
Lyman limit systems and the circumgalactic medium at $z \sim 2-3$.

Jun., 2013 **ENIGMA workshop**, *MPIA*, invited.
Lyman limit systems and the circumgalactic medium at $z \sim 2-3$.

Apr., 2013 **Lunch Talk**, *Carnegie Observatories*.
Beyond the disk: The role of halo gas in galaxy formation.

Mar., 2013 **Hubble Fellows Symposium**, *STScI, Baltimore*.
Optically-thick hydrogen in the z=3 universe

Dec., 2012 **University of Milano-Bicocca**, *Milan*, invited.
The gaseous environment of distant galaxies

Nov., 2012 **UT Astronomy Colloquium**, *Austin*, invited.
The gaseous environment of distant galaxies

Sep., 2012 **Keck Science Meeting**, *San Diego*.
Pristine gas two billion years after the Big Bang

Jun., 2012 **Metals in Tuscany**, *INAF/Firenze*, invited.
Pristine gas two billion years after the Big Bang

May., 2012 **Price Prize lecture**, *CCAPP Ohio State University*, invited.
Cosmology with absorption line systems

Apr., 2012 **Astronomy Colloquium**, *Osservatorio Astronomico di Brera*, invited.
Cosmology with absorption line systems

Mar., 2012 **Turbulence in Cosmic Structure Formation**, *Arizona State University*.
Detection of pristine gas two billion years after the Big Bang

Jan., 2012 **DARK Cake Meeting**, *DARK Cosmology Centre*.
Detecting cold accretion and metal poor gas around galaxies

Jan., 2012 **219th AAS Meeting**, *Austin, TX*.
Exploring the gas cycle in high-redshift galaxies: a joint effort of theory and observations

Dec., 2011 **Theory meeting of the Galaxy and Cosmology group**, *MPIA Heidelberg*.
Probing inflow in high-redshift galaxies

Oct., 2011 **Theoretical Astrophysics Center seminar**, *UC Berkeley*, invited.
Exploring the gas cycle in high-redshift galaxies: a joint effort of theory and observations

Oct., 2011 **Lunch Talk**, *Carnegie Observatories*.
Exploring the gas cycle in high-redshift galaxies: a joint effort of theory and observations

Oct., 2011 **Astronomy Tea Talk**, *Caltech*.
Exploring the gas cycle in high-redshift galaxies: a joint effort of theory and observations

Aug., 2011 **Santa Cruz galaxy workshop**, *Santa Cruz*.
Cold streams and primordial gas at high redshift

Jul., 2011 **Celebrating the career of A. Wolfe**, *Schloss Ringberg*, invited.
Detecting cold streams with absorption line systems

Jul., 2011 **MPIA**, *Heidelberg*.
Stochastic star formation and IMF (non) variation

Jun., 2011 **Odyssey of cosmic baryons**, *Marseille*.
Detecting cold streams with absorption line systems

Jun., 2011 **Gas in galaxies**, *Kloster Seeon, Germany*.
Detecting cold streams with absorption line systems

Dec., 2010 **CASS, UCSD**, *San Diego*.
Gas in and around galaxies

Aug., 2010 **Santa Cruz galaxy workshop**, *Santa Cruz*.
Gas in simulations of $z > 2$ galaxies

May, 2010 **Como+Milano+Heidelberg+Marseille**.
Images and simulations to connect gas and stars in $z > 2$ galaxies

Apr., 2010 **UCSC**, *Santa Cruz*.
Hunting gas and stars in galaxies across the Universe

Aug., 2009 **Santa Cruz Galaxy Workshop**, *Santa Cruz*.
A shot in the dark: probing galaxies giving rise to DLAs at $z > 2$

Aug., 2009 **UCSC Friday Lunch Talk**, *Santa Cruz*.
Molecular gas deficiency in HI poor galaxies

Jun., 2009 **University of Chicago**, *Chicago*.
A shot in the dark: imaging of DLAs

Mar., 2009 **Università dell'Insubria**, *Como, Italy*.
Star formation $z = 0 - 3$

Dec., 2008 **CASS, UCSD**, *San Diego*.
The star formation rate and gas content in local spiral galaxies

Jul., 2008 **Università di Milano-Bicocca**, *Milano, Italy*.
The relationship between gas content and star formation rate in spiral galaxies

Proposal History (principal investigator or primary co-investigator)

2019 ESO/VLT; 43 hours, P105.

2019 Hubble Space Telescope; 8 orbits, cycle 27.

2019 JCMT/SCUBA-2; 30 hours, 2019B.

2018 Hubble Space Telescope; 90 orbits, cycle 26 (LP).

2017 ESO/VLT; 250 hours, P101 (LP).

2018 JCMT/SCUBA-2; 16 hours, 2018A.

2017 ESO/VLT; 36 hours, P100.
2017 JCMT/SCUBA-2; 9 hours, 2017B.
2016 ESO/VLT; 18 hours, P99.
2016 Keck Telescope; 2 nights, 2016B.
2016 Hubble Space Telescope; 96 orbits, cycle 24 (LP).
2016 JCMT/SCUBA-2; 9 hours, 2016B.
2016 Keck Telescope; 1 night, 2016A.
2016 WHT; 12 nights, 2016A.
2016 ESO/VLT; 106 hours, P97-100 (LP).
2015 WHT; 9 nights, 2015B.
2015 ESO/VLT; 9 hours, P96.
2015 Hubble Space Telescope; 55 orbits, cycle 23.
2014 ESO/VLT; 28 hours, P95.
2014 ESO/VLT; 5 hours, P94.
2014 Gemini-S Telescope; 30 hours, 2014A.
2014 Magellan Telescope; 4 nights, 2014A.
2013 Magellan Telescope; 5 nights, 2013B.
2013 Keck Telescope; 1 night, 2013B.
2012 Keck Telescope; 1 night, 2013A.
2012 Magellan Telescope; 4 nights, 2013A.
2012 Magellan Telescope; 4 nights, 2012B.
2011 IRAM 30m Telescope; 64 hours, 2011B.

Teaching and Advising

2019- Astrophysics Laboratory; MSc at University of Milano-Bicocca.
2018-2019 Radiative processes in astrophysics; PhD lecture series at Durham University.
2018 The role of baryonic process in galaxy formation and evolution; PhD lecture series at University of Milano-Bicocca.
2016-2017 PHYS2651: Physics in Society, BSc at Durham University.
2014-2019 PHYS1081: Introduction to Astronomy, BSc at Durham University.
2014-2018 PHYS1101: Discovery Skills in Physics, BSc at Durham University.
2009 Ay2: Overview of the Universe, BSc at UCSC.

PhD Students Mr. Calvin Sykes (2017-), Durham University.
Ms. Louise Welsh (2017-), Durham University.
Mr. Ruari Mackenzie (2014-2018), Durham University (PhD, 2018).
Mr. Greg Ashworth (2014-2018), Durham University (PhD, 2018).

PDRAs Dr. Rajeshwari Dutta (2019-), Durham University.
Dr. Matteo Fossati (2018-), Durham University.
Dr. Emma Lofthouse (2018-), Durham University.
Dr. Elisabeta Lusso (2017-2019), Junior Research Fellow, Durham University.

Dr. Richard Bielby (2017-2019), Durham University.

Membership and Activities

2018- Peer reviewer, Nature
2018- Peer reviewer, European Research Council
2017- Peer reviewer, Nature Astronomy
2016-2018 Member of Van Mildert College Council, Durham University
2016- E-ELT HIRES Galaxy and IGM Working Group
2012- Peer reviewer, Astrophysical Journal
2012- Peer reviewer, Monthly Notices of the Royal Astronomical Society
2012- Peer reviewer, Astronomy and Astrophysics
2011-2012 Graduate Student Mentor, UCSC Astronomy & Astrophysics Department
2011-2015 Member, European Physical Society
2011-2012 Member, American Astronomical Society
2008-2015 Member, Società Italiana di Fisica

Refereed publications

1. Cooke, R., Welsh, L., **Fumagalli, M.**, Pettini, M. 2020, MNRAS submitted (arXiv:2001.06016). *A limit on Planck-scale froth with ESPRESSO.*
2. Welsh, L., Cooke, R., **Fumagalli, M.**, Pettini, M. 2020, MNRAS submitted (arXiv:2001.04983). *A bound on the 12C/13C ratio in near-pristine gas with ESPRESSO.*
3. Buie, E., **Fumagalli, M.**, Scannapieco, E. 2020, ApJ in press (arXiv:2001.04965). *Interpreting Observations of Absorption Lines in the Circumgalactic Medium with a Turbulent Medium.*
4. Sykes, C., **Fumagalli, M.**, Cooke, R., Theuns, T. 2019, MNRAS in press (arXiv:1912.06163). *Determining the primordial helium abundance and UV background using fluorescent emission in star-free dark matter haloes.*
5. Lofthouse, E.K., **Fumagalli, M.**, Fossati, M. et al. 2019, MNRAS in press (arXiv:1910.13458). *MUSE Analysis of Gas around Galaxies (MAGG) – I: Survey design and the environment of a near pristine gas cloud at z 3.5.*
6. Fossati, M., **Fumagalli, M.**, Lofthouse, E.K. et al. 2019, MNRAS, 490, 1451. *The MUSE Ultra Deep Field (MUDF). II. Survey design and the gaseous properties of galaxy groups at* $0.5 < z < 1.5$.
7. Umehata, H., **Fumagalli, M.**, Smail, I. et al. 2019, Science, 366, 97. *Gas filaments of the cosmic web located around active galaxies in a proto-cluster.*
8. Becker, G.D. et al. 2019, ApJ, 883, 163. *The Evolution of OI over* $3.2 < z < 6.5$*: Reionization of the Circumgalactic Medium.*
9. Jachym, P. et al. 2019, ApJ, 883, 145. *ALMA unveils widespread molecular gas clumps in the ram pressure stripped tail of the Norma jellyfish galaxy.*
10. **Fumagalli, M.** 2019, Nature Astronomy, 3, 796. *Thirsty galaxies thriving on gas streams.*
11. Sykes, C., **Fumagalli, M.**, Cooke, R., Theuns, T., Benitez-Llambay, A. 2019, MNRAS, 487, 609. *Fluorescent rings in star-free dark matter haloes.*

12. Mackenzie, R., **Fumagalli, M.**, Theuns, T. et al. 2019, MNRAS, 487, 5070. *Linking gas and galaxies at high redshift: MUSE surveys the environments of six damped Lyα galaxies at $z \sim 3$.*
13. Welsh, L., Cooke, R., **Fumagalli, M.** 2019, MNRAS, 487, 3363. *Modelling the chemical enrichment of Population III supernovae: The origin of the metals in near-pristine gas clouds.*
14. Bielby, R.M. et al. 2019, MNRAS, 86, 21. *Quasar Sightline and Galaxy Evolution (QSAGE) Survey - I. The Galaxy Environment of OVI Absorbers up to $z = 1.4$ around PKS 0232-04.*
15. Lusso, E., **Fumagalli, M.**, Fossati, M., et al. 2019, MNRAS, 485, 62. *The MUSE Ultra Deep Field (MUDF). I. Discovery of a group of Lyα nebulae associated with a bright $z \approx 3.23$ quasar pair.*
16. Furniss, A., Worseck, G., **Fumagalli, M.** et al. 2019, AJ, 157, 41. *Spectroscopic Redshift of the Gamma-Ray Blazar B2 1215+30 from Lyα Emission.*
17. Cook, D.O. et al. 2019, MNRAS, 484, 4897. *Star Cluster Catalogs for the LEGUS Dwarf Galaxies.*
18. Fossati, M., **Fumagalli, M.**, Gavazzi, G. et al. 2019, MNRAS, 484, 2212. *MUSE sneaks a peek at extreme ram-pressure stripping events - IV. Hydrodynamic and gravitational interactions in the Blue Infalling Group.*
19. Grasha, K. et al. 2019, 483, 4707. *The Spatial Relation between Young Star Clusters and Molecular Clouds in M 51 with LEGUS.*
20. P. Frédéric Robert et al. 2019, MNRAS, 483, 2736. *Exploring the origins of a new, apparently metal-free gas cloud at $z = 4.4$.*
21. Jauzac, M. et al. 2019, MNRAS, 483, 3082. *The core of the massive cluster merger MACS J0417.5-1154 as seen by VLT/MUSE.*
22. Arrigoni Battaia, F., Chen, C.-C., **Fumagalli, M.** et al. 2018, A&A, 620, 202. *Over-density of submillimeter galaxies around the z=2.3 MAMMOTH-1 nebula.*
23. Boselli, A. et al. 2018, A&A, 620, 164. *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE).IV. A tail of Ionised Gas in the Merger Remnant NGC 4424.*
24. Krumholz, M. R., Adamo, A., **Fumagalli, M.**, Calzetti, D. 2019, MNRAS, 482, 3550. *SLUG IV: A Novel Forward-Modelling Method to Derive the Demographics of Star Clusters.*
25. Caruso, D., Haardt, F., **Fumagalli, M.**, Cantalupo, S. 2019, MNRAS, 482, 2833. *MCMC determination of the cosmic UV background at $z \approx 0$ from Hα fluorescence.*
26. Cooke, R. & **Fumagalli, M.** 2018, Nature Astronomy, 2, 957. *Measurement of the primordial helium abundance from the intergalactic medium.*
27. Krogager, J.-K. et al. 2018, A&A, 619, 142. *Dissecting cold gas in a high-redshift galaxy using a lensed background quasar.*
28. Grasha, K. et al. 2018, MNRAS, 481, 1016. *Connecting Young Star Clusters to CO Molecular Gas in NGC 7793 with ALMA-LEGUS.*
29. Ashworth, G., **Fumagalli, M.**, Adamo, A., Krumholz, M.R. 2018, MNRAS, 480, 3091A. *Theoretical predictions for IMF diagnostics in UV spectroscopy of star clusters.*
30. Hunter, D. et al. 2018, AJ, 156, 21. *A comparison of young star properties with local galactic environment for LEGUS/LITTLE THINGS dwarf irregular galaxies.*

31. Boselli, A. et al. 2018, A&A, 615, 114. *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE).III. Star formation in the stripped gas of NGC 4254.*
32. Chehade, B. et al. 2018, MNRAS, 478, 1649. *Two more, bright, $z > 6$ quasars from VST ATLAS and WISE .*
33. Boselli, A. et al. 2018, A&A, 614, 56. *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE).I. Introduction to the Survey.*
34. Fossati, M. et al. 2018, A&A, 614, 57. *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE). III. Constraining the quenching time in the stripped galaxy NGC 4330.*
35. Lusso, E., **Fumagalli, M.**, Rafelski, M. et al. 2018, ApJ, 860, 41. *The spectral and environment properties of $z \sim 2.0 - 2.5$ quasar pairs.*
36. Findlay, J.R. et al. 2018, ApJS, 236, 44. *Quasars probing quasars X: The quasar pair spectral database.*
37. Messa, M. et al. 2018, MNRAS, 477, 1683. *The Young Star Cluster population of M51 with LEGUS: II. Testing environmental dependencies.*
38. Kahre, L. et al. 2018, ApJ, 855, 133. *Extinction Maps and Dust-to-Gas Ratios in Nearby Galaxies.*
39. Gavazzi, G., Consolandi, G., Pedraglio, S., Fossati, M., **Fumagalli, M.**, Boselli, A. 2018, A&A, 611, 28. *Hα imaging observations of early-type galaxies from the ATLAS3D survey.*
40. Hunter, D. et al. 2018, ApJ, 855, 7. *A study of two dwarf irregular galaxies with asymmetrical star formation distributions.*
41. Sabbi, E. et al. 2018, ApJS, 235, 23. *The resolved stellar populations in the LEGUS galaxies.*
42. Messa, M. et al. 2018, MNRAS, 473, 996. *The Young Star Cluster population of M51 with LEGUS: I. A comprehensive study of cluster formation and evolution.*
43. Consolandi, G., Gavazzi, G., Fossati, M., **Fumagalli, M.**, Boselli, A., Yagi, M., Yoshida, M. et al. 2017, A&A, 606, 83. *MUSE sneaks a peek at extreme ram-pressure events - III. Tomography of UGC 6697, a massive galaxy falling into Abell 1367.*
44. **Fumagalli, M.**, Mackenzie, R., Trayford, J. et al. 2017, MNRAS, 471, 3686. *Witnessing galaxy assembly in an extended $z \approx 3$ structure.*
45. Grasha, K. et al. 2017, ApJ, 842, 25. *Hierarchical Star Formation in Turbulent Media: Evidence from Young Star Clusters.*
46. Ashworth, G., **Fumagalli, M.**, Krumholz, M.R. et al. 2017, MNRAS, 469, 2464. *Exploring the IMF of star clusters: a joint SLUG and LEGUS effort.*
47. Ryon, J.E. et al. 2017, ApJ, 841, 92. *Effective Radii of Young, Massive Star Clusters in Two LEGUS Galaxies.*
48. Adamo, A. et al. 2017, ApJ, 841, 131. *Legacy ExtraGalactic UV Survey with The Hubble Space Telescope. Stellar cluster catalogues and first insights into cluster formation and evolution in NGC 628.*
49. Grasha, K. et al. 2017, ApJ, 840, 113. *The Hierarchical Distribution of the Young Stellar Clusters in Six Local Star Forming Galaxies.*
50. Bielby, R., Crighton, N.H.M, **Fumagalli, M.** et al. 2017, MNRAS, 468, 1373. *Probing the intra-group medium of a $z = 0.28$ galaxy group.*

51. Swinbank, M. et al. 2017, MNRAS, 467, 3140. *Angular momentum evolution of galaxies over the past 10 Gyr: A MUSE and KMOS dynamical survey of 400 star-forming galaxies from $z = 0.3 - 1.7$.*
52. **Fumagalli, M.**, Haardt, F., Theuns, T., Morris, S.L., Cantalupo, S., Madau, P., Fossati, M. 2017, MNRAS, 467, 4802. *A measurement of the $z = 0$ UV background from Hα fluorescence.*
53. Prochaska et al. 2017, ApJ, 837, 169. *The COS-Halos Survey: Metallicities in the Low-Redshift Circumgalactic Medium.*
54. Lehner, N., O'Meara, J.M., Howk, J.C., Prochaska, J.X., **Fumagalli, M.** 2016, ApJ, 833, 283. *The Cosmic Evolution of the Metallicity Distribution of Ionized Gas Traced by Lyman Limit Systems.*
55. Toy, V.L. et al. 2016, ApJ, 832, 175. *Exploring Damped Lyman-α System Host Galaxies using Gamma-ray Bursts.*
56. **Fumagalli, M.**, Cantalupo, S., Dekel, A., Morris, S.L., O'Meara, J.M, Prochaska, J.X., Theuns, T. 2016, MNRAS, 462, 1978. *MUSE searches for galaxies near very metal-poor gas clouds at $z \sim 3$: new constraints for cold accretion models.*
57. Rafelski, M., Gardner, J.P., **Fumagalli, M.** et al. 2016, ApJ, 825, 87. *The Star Formation Rate Efficiency of Neutral Atomic-dominated Hydrogen Gas in the Outskirts of Star Forming Galaxies from $z \sim 1$ to $z \sim 3$.*
58. Consolandi, G., Gavazzi, G., **Fumagalli, M.** et al. 2016, A&A, 591, 38. *Robust automatic photometry of local galaxies from SDSS. Dissecting the color magnitude relation with color profiles.*
59. Finn, C. et al. 2016, MNRAS, 460, 590. *On the connection between the metal-enriched intergalactic medium and galaxies: an OVI-galaxy cross-correlation study at $z < 1$.*
60. Archambault, S. et al. 2016, AJ, 151, 142. *Upper limits from five years of blazar observations with the VERITAS Cherenkov telescopes.*
61. Boselli, A. et al. 2016, A&A, 587, 68. *Spectacular tails of ionised gas in the Virgo cluster galaxy NGC 4569*
62. Grasha, K. et al. 2015, ApJ, 815, 93. *The Spatial Distribution of the Young Stellar Clusters in the Star Forming Galaxy NGC 628.*
63. **Fumagalli, M.**, O'Meara, J.M., Prochaska, J.X. 2016, MNRAS, 455, 4100. *The physical properties of $z > 2$ Lyman limit systems: new constraints for feedback and accretion models.*
64. Fossati, M., **Fumagalli, M.**, Boselli, A. et al. 2016, MNRAS, 455, 2028. *MUSE sneaks a peek at extreme ram-pressure stripping events. II. The physical properties of the gas tail of ESO137-001.*
65. Farina, E., **Fumagalli, M.**, Decarli, R. et al. 2016, MNRAS, 455, 618. *The Cluster-Scale Environment of PKS 2155-304.*
66. Krumholz, M. R., Adamo, A., **Fumagalli, M.**, et al. 2015, ApJ, 812, 147. *Star Cluster Properties in Two LEGUS Galaxies Computed with Stochastic Stellar Population Synthesis Models.*
67. Calzetti, D. et al. 2015, ApJ, 811, 75. *The Brightest Young Star Clusters in NGC 5253.*
68. Prochaska, J.X. et al. 2015, ApJS, 221, 2. *The Keck+Magellan Survey for Lyman Limit Absorption III: Sample Definition and Column Density Measurements.*

69. Crighton, N. et al. 2015, MNRAS, 452, 217. *The Neutral Hydrogen Cosmological Mass Density at $z = 5$.*
70. Krumholz, M., **Fumagalli, M.**, da Silva, R., Rendahl, T., Parra, J. 2015, MNRAS, 452, 1447.*SLUG – Stochastically Lighting Up Galaxies. III: A Suite of Tools for Simulated Photometry, Spectroscopy, and Bayesian Inference with Stochastic Stellar Populations.*
71. Gavazzi, G. et al. 2015, A&A, 580, 116. *Halpha3: an Halpha imaging survey of HI selected galaxies from ALFALFA . VI. The role of bars in quenching star formation from z = 3 to the present epoch.*
72. Carnall, A. C. et al. 2015, MNRAS, 451, 16. *Two bright $z > 6$ quasars from VST ATLAS and a new method of optical plus mid-infra-red colour selection.*
73. Cucchiara, A., **Fumagalli, M.**, Rafelski, M., Kocevski, D., Prochaska, J.X., Cooke, R.J., Becker, G.D. 2015, ApJ, 804, 51.*Unveiling the Secrets of Metallicity and Massive Star Formation Using DLAs along Gamma-ray Bursts.*
74. Gavazzi, G. et al. 2015, A&A, 576, 16. *Halpha3: an Halpha imaging survey of HI selected galaxies from ALFALFA . V. The Coma supercluster survey completion.*
75. Calzetti, D. et al. 2015, AJ, 149, 51. *Legacy ExtraGalactic UV Survey (LEGUS) with The Hubble Space Telescope. I. Survey Description.*
76. **Fumagalli, M.**, O'Meara, J.M., Prochaska, J.X., Rafelski, M., Kanekar, N. 2015, MNRAS, 446, 3178. *Directly imaging damped Lyα galaxies at $z > 2$. III: The star formation rates of neutral gas reservoirs at $z \sim 2.7$.*
77. Crighton, N. et al. 2015, MNRAS, 446, 18. *Metal-enriched, sub-kiloparsec gas clumps in the circumgalactic medium of a faint $z = 2.5$ galaxy.*
78. **Fumagalli, M.**, Fossati, M., Hau, G. et al. 2014, MNRAS, 445, 4335.*MUSE sneaks a peek at extreme ram-pressure stripping events. I. A kinematic study of the archetypal galaxy ESO137-001.*
79. Aliu, E. et al. 2014, ApJ, 797, 89. *Investigating Broadband Variability of the TeV Blazar 1ES 1959+650.*
80. Boselli, A. et al. 2014, A&A, 570, 69. *The GALEX Ultraviolet Virgo Cluster Survey (GUViCS). IV: The role of the cluster environment on galaxy evolution*
81. Worseck, G. et al. 2014, MNRAS, 445, 1745. *The Giant Gemini GMOS survey of $z > 4.4$ quasars. I: Measuring the mean free path across cosmic time.*
82. da Silva, R.L., **Fumagalli, M.**, Krumholz, M. 2014, MNRAS, 444, 3275. *SLUG - Stochastically Lighting Up Galaxies. II: Quantifying the Effects of Stochasticity on Star Formation Rate Indicators.*
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