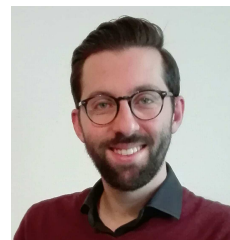


Federico Lelli

Curriculum Vitae

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Work Experience

- 2026–Present Associate Professor, Department of Physics, University of Cagliari, Cagliari (IT).
- 2024–2026 Lead Researcher, II Level, Arcetri Astrophysical Observatory, INAF, Florence (IT).
- 2021–2024 Researcher, III Level, Arcetri Astrophysical Observatory, INAF, Florence (IT).
- 2020 Research Associate, Cardiff University, Cardiff (UK).
- 2019–2020 Regular Visitor, Kavli Institute for Cosmology, Cambridge (UK).
- 2017–2019 Reserach Fellow, European Southern Observatory (ESO), Garching (Germany).
- 2014–2016 Research Associate, Case Western Reserve University (CWRU), Cleveland (USA).

Education & Degrees

- 2009–2013 **Ph.D.**, *Astronomy (cum laude)*, University of Groningen, Netherlands.
Thesis: Starbursts and gas dynamics in low-mass galaxies.
- 2006–2009 **M.S.**, *Astrophysics & Cosmology (cum laude)*, University of Bologna, Italy.
Thesis: Dark and luminous matter in giant low surface brightness galaxies.
- 2003–2006 **B.S.**, *Astronomy (cum laude)*, University of Bologna, Italy.
Thesis: Stationary models for the rotation of extra-planar gas in disc galaxies.

Scientific Outputs

- Publications: **94** refereed papers: **23** as 1st author, **27** as 2nd author, **15** as 3rd author.
H-index = **38**. Total Citations = **~6000** (source: NASA/ADS on Oct. 2026).
First-author H-index = **19**. First-author Citations = **~2800**.
- Conferences: **24** invited lectures, reviews, or talks. **41** contributed talks. **3** posters.
- Seminars: **29** invited colloquia and **37** seminars in America, Australia, Asia, and Europe.
- Observations: **61** accepted proposals (**20** as PI) at various facilities (e.g., ALMA, JWST, VLA).

Fundings & Awards

- 2025 FIS consolidator grant (~1.5 million €, similar to an ERC consolidator grant) to fund the project “Galaxy dynamics across cosmic time to unveil dark matter”.
- 2025 INAF large-grant (190,000 €) to fund the TRICEPS project.
- 2024 INAF grant (120,000 €) to hire a postdoc working on SKA-related science.
- 2023 INAF mini-grant (20,000 €) to cover travel costs and basic research expenses.
- 2017–2019 ESO Fellowship (~200,000 €). Three years of independent research at ESO Germany.
- 2014–2016 Grant from the John Templeton Foundation (365,000 \$) for three years of research at CWRU (PI: S.S. McGaugh, Co-Is: F. Lelli & M. Pawlowski).

- 2013 Dutch “cum laude” distinction. Top 5% Ph.D. theses in The Netherlands.
- 2009–2013 Ubbo Emmius Scholarship from the Groningen Graduate School of Science ($\sim 100,000$ €). Four years of Ph.D. research on a project proposed by the student.
- 2009–2013 Leids Kerkhoven-Bosscha Fonds ($\sim 3,000$ €) to attend international meetings.

International Collaborations

Projects as PI

- 2019–Present **TRICEPS**: ALMA and JWST survey to study the distribution of mass (baryons and dark matter) in galaxies at $z = 4 - 5$ at spatial resolutions of ~ 500 pc. PI: F. Lelli.
- 2014–Present **SPARC**: Dynamical database the provides rotation curves and mass models for 175 galaxies at $z \simeq 0$. Core members: F. Lelli, S. McGaugh & J. Schombert

Projects as Co-I

- 2020–Present **WISDOM**: CO surveys with ALMA to measure black-hole masses in nearby galaxies. I have the role of expert in dynamical modeling. PIs: T. Davis & M. Bureau.
- 2017–2025 **GROUPS**: Various surveys with the ESO-VLT and INAF-VST to study dwarf satellite systems around major galaxies within 10 Mpc. PI: O. Müller.
- 2018–2023 **DWALIN**: Multi-wavelength study of starburst dwarf galaxies with VLT/MUSE, HI from VLA, and CO from ALMA. Core members: G. Cresci, A. Marasco, L. Hunt.
- 2015–2023 **TDG**: Multi-wavelength study of tidal dwarf galaxies around interacting systems. I am the PI of HI and CO campaigns. Core members: P.-A. Duc, E. Brinks.

Large Collaborations

- 2024–Present **CONDOR**: ALMA large program to study molecular galaxies at cosmic noon. I have the role of expert in dynamical modeling. PIs: F. Rizzo & M. Kassinen.
- 2024–Present **KILOGAS**: CO survey with ALMA to study molecular gas in nearby galaxies. I have the role of expert in dynamical modeling. PIs: A. Santonge & T. Davis.
- 2021–Present **DINGO**: Deep HI survey with the Australian SKA Pathfinder. PI: Martin Meyer.
- 2021–Present **SKA**: The Square Kilometer Array is the next-generation radio interferometer. I am a member of the Science Working Groups “HI Galaxy Science” and “Cosmology”.
- 2021–Present **EUCLID**: I am a member of the Science Working Group: “Local Universe”.
- 2019–Present **WALLABY**: Wide-field HI survey with the Australian SKA Pathfinder. I am the co-chair of the Technical Working Group “Kinematics Pipeline”.

Supervision & Mentorship

Postdocs

- 2025–Present **Ilaria Ruffa**, INAF - Arcetri Astrophysical Observatory (Italy).
Status: Working on HI data from the MeerKAT telescope. One paper in prep.
- 2025–2026 **Yong Tian**, Sejong University (South Korea), Co-supervision with K.-H. Chae.
Status: Two visits at INAF-OAA with common funds. One paper published.

PhD students

- 2025–Present **Lingrui Lin**, Nanjing University (China). Co-supervision with Z.-Y. Zhang.
Status: One-year visit at INAF-OAA with funds from the China Scholarship Council.
- 2023–Present **Konstantin Haubner**, University of Florence (Italy).
Status: working on the BIG-SPARC database. Two papers published.

- 2016–2020 **Pengfei Li**, CWRU (USA). Co-supervision with S.S. McGaugh.
Status: Thesis completed. Five papers published. Now Associate Prof. at Nanjing Univ.
- 05–06 2019 **Jonas Petersen**, University of Southern Denmark (Odense).
Status: Two-months visit at ESO-Germany with Danish funds. One paper published.

Master students

- 2025–2026 **Francesco Capomassi**, University of Rome (Italy).
Status: Thesis completed with top marks. One paper in prep.
- 04–06 2025 **Vincent LeFloch**, Sorbonne Université (France).
Status: Two-months internship at INAF-OAA. Project successfully completed.
- 04–10 2023 **Ruth Kelleher**, University of Padova (Italy).
Status: Thesis completed with top marks. One paper published.
- 09–12 2020 **Navyasree Kovakkuni**, Cardiff University (UK).
Status: Thesis completed. One paper published. Now PhD student at Antofagasta Univ.
- 2018–2019 **Alexandra Shelest**, Ludwig Maximilian University (Munich, Germany).
Status: Thesis completed. One paper published. Now Laboratory Assistant at EPFL.

Bachelor students

- 2024–2025 **Zichen Hua**, University of Science and Technology of China (USTC).
Status: 6 months internship at INAF-OAA to work on his bachelor thesis. Thesis completed. Two papers published. Now master student at Heidelberg Univ.
- 2017–2018 **Nathaniel Starkman**, CWRU (USA). Co-supervision with S.S. McGaugh.
Status: Thesis completed. One paper published. Now postdoctoral fellow at M.I.T.
- 2015–2016 **Elizabeth Tarantino**, CWRU (USA). Co-supervision with S.S. McGaugh.
Status: Thesis completed. Now postdoctoral fellow at Space Telescope Science Institute.

Organization of International Meetings

6. **SOC (chair)**, *Lorentz Center workshop “MOND: Alternative paths in the dark matter problem”*, Leiden (Netherlands), 1–5 Sept. 2025.
5. **SOC**, *international conference “MOND at 40: Celebrating 40 years of Milgromian dynamics and charting the road ahead”*, St. Andrews (UK), 5–9 June 2023.
4. **SOC**, *international workshop “The present and future of Astronomy: A critical look at hiring, evaluation processes, the way we do science and our role in society”*, ESO virtual meeting, 14–18 February 2022.
3. **SOC**, *symposium “Stellar & Gas Kinematics in Galaxies across cosmic time, connecting observations with theory”*, EAS virtual meeting, 29 June – 3 July 2020.
2. **SOC**, *international workshop “Galaxy interactions and mergers across cosmic time”*, Sexton Center for Astrophysics, 11–16 March 2018.
1. **SOC**, *international workshop “Dwarf galaxies on the shoulders of giants”*, Case Western Reserve University, 5–8 June 2017.

Boards & Commissions of Trust

- 2024–Present Member of the *European Science Advisory Committee* (ESAC) for ALMA.
- Dec. 2025 Member of the selection committee for a fixed-term researcher position at INAF-OAA.
- Feb. 2024 Chair of the selection committee for a postdoc position at INAF-OAA.
- March 2019 Co-chair of the selection committee of the ESO Summer Research Program.

ESO Community Work

- 2018–2019 ALMA helpdesk triage. User support via the ALMA helpdesk (European ARC).
- 2017–2018 ALMA astronomer on duty (28 days in total). Scheduling and execution of observations at the ALMA site (Operations Support Facility, Chile).
- 2018 ESO secretary during the meeting of the ESO User Committee.
- 2017–2018 ALMA data analyst. Calibration, imaging, and quality assurance of ALMA data.

Reviewing Activities

- Nov. 2023 Reviewer of Large Programs submitted to the JWST observatory.
- May 2023 Reviewer of PhD theses for “Premio Magini 2023”.
- May 2022 Reviewer of Large Programs submitted to the ALMA observatory.
- February 2021 Reviewer of the PhD thesis of V. Cesare (Univ. of Torino).
- October 2020 Reviewer for the Chilean Research Council (FONDECYT).
- April 2020 Reviewer for the Time Allocation Committee of the JCMT.
- October 2019 Reviewer of job applications for the ESO Fellowship Programme (Garching).
- October 2018 Reviewer for the Chilean Research Council (FONDECYT).
- January 2018 Reviewer for the Time Allocation Committee of the GMRT (India).
- October 2017 Reviewer for the South Africa National Research Foundation (NRF).
- October 2016 Reviewer of the PhD thesis of K. M. Mogotsi (University of Cape Town).
- 2013–Present Reviewer for all major Astronomy and Physics journals (A&A, AAS journals, Annals of Physics, Ap&SS, Galaxies, MNRAS, Nature, Physical Review journals, Physics of the Dark Universe, Science, Universe).

Teaching Activities

- 2026–Present Course “Physics I” (80 hrs) for 1st-year bachelor students, Faculty of Engineering and Architecture, University of Cagliari.
- 2025–2026 Module “Dark Matter” (12 hrs) for the bachelor course “Frontiers of Astrophysics” held by Prof. Guido Risaliti and Prof. Andrea Verdini, University of Florence.
- 2024–2025 Contributed lectures (4 hrs/year) for the master course “First stars, first galaxies” held by Prof. Stefania Salvadori, University of Florence.
- 2021–2023 Contributed lectures (4 hrs/year) for the master course “Cosmology II” held by Prof. Stefania Salvadori, University of Florence.
- May 2021 Contributed lecture “Alternatives to dark matter” (2 hrs) for the PhD course “Dark Matter” held by Dr. Edvige Corbelli, University of Florence.
- 2015–2016 Contributed lectures (4 hrs/year) for the bachelor course “Astronomy 151” held by Prof. Chris Mihos, CWRU.

Academic Activities

- 2022–2024 Organizer of the joint Florence Extragalactic Group Meetings.
- 2022–2023 Member of the scientific communication committee at INAF-OAA.
- June 2020 External member of the PhD committee of P. Li (CWRU).
- 2017–2018 Fellow Mentor of the Ph.D. student Christian Peest (internal ESO responsibility).
- March 2017 Organizer of the ESO Garching Science Day 2017.

- February 2017 External member of the *PhD committee* of A. Ponomareva (Univ. of Groningen).
- 2015–2016 Organizer of the Colloquium Series at CWRU Astronomy Department.
- 2014–2015 Organizer of the weekly Journal Club at CWRU Astronomy Department.
- 2011–2013 Organizer of the weekly lunch-talks at the Kapteyn Astronomical Institute.

Training Activities

- Dec. 2023 Conflict management training course for INAF employes (6 hours).
- July 2021 Safety training course for INAF employes (half day).
- July 2019 ERC grant writing training for ESO employes & Fellows (1 day).
- June 2019 Supervising training course for ESO fellows & students (half day).
- October 2018 Basic management training course for ESO fellows & students (2 days).
- October 2017 Courtesy, respect & fair-treatment training for ESO fellows & students (2 days).

Interviews by Media

- June 2025 Interview for the INAF magazine “Universi”.
- Nov. 2024 Interview for “TG Leonardo” on the National TV channel *Rai 3*.
- Nov. 2024 Interview for the Italian newsletter *Media INAF* by Rossella Spiga.
- May 2023 Interview for the Italian newsletter *Media INAF* by Maura Sandri.
- Feb. 2021 Interviews for *New Scientist*, *Gizmodo*, *ZME Science*.
- Jan. 2021 Interview for the Italian newsletter *Media INAF* by Luca Nardi.
- Dec. 2020 Interview for the Italian newsletter *Media INAF* by Maura Sandri.
- August 2020 Interview for Pythagorean Astronomy podcast by Christopher North.
- July 2020 Interview for the Italian newsletter *Media INAF* by Luca Nardi.
- June 2018 Interview for *Physics World* by Tim Wogan.
- May 2018 Interview for *Quanta Magazine* by Natalie Wolchover.
- March 2018 Interview for the Italian newspaper *Il Corriere Adriatico* by Lucilla Niccolini.
- February 2018 Interview for the Italian newspaper *La Repubblica* by Massimiliano Razzano.
- February 2018 Interview for the *ESO blog* by Lauren Fuge.
- February 2018 Interview for the Italian newsletter *Media INAF* by Marco Malaspina.
- August 2017 Interview for *BBC Focus* magazine by Robert Matthews.
- October 2016 Interview for the Italian newsletter *Media INAF* by Corrado Ruscica.
- October 2016 Interview for the Italian newspaper *Il Manifesto* by Andrea Capocci.

Outreach Activities

- Apr. 2024 Outreach seminar for the cultural association “Ipazia”, Falconara Marittima, Italy.
- June 2024 Outreach event *Festival di Astronomia*, Livorno, Italy.
- Sept. 2023 Outreach event *Bright-Night* at the Arcetri Astrophysical Observatory, Italy.
- Jun. 2021 Outreach seminar for “Astronomy Festival” at Castellaro Lagusello, Italy.
- March 2022 Outreach article on modified gravity theories (in Italian) for “Giornale di Astronomia”.
- Jun. 2021 Outreach seminar for “Notti d'Estate” at Arcetri Astrophysical Observatory, Italy.
- Jun. 2021 Outreach seminar for the Italian association AstronomiAmo.
- August 2019 Outreach article for the Italian newspaper *Il Fatto Quotidiano*.

March 2018 Video contribution to the Italian web-show *Occhi al Cielo* by Ass. AstronomiAmo.
March 2017 Video contribution to the Italian web-show *Occhi al Cielo* by Ass. AstronomiAmo.

Accepted Observing Proposals

Summary: Total = **61** PI = **20** Total hours > **1500**

Proposals as PI

20. ALMA 2026: 39.9 hrs (12 m); PI: F. Lelli (A priority)
19. ALMA 2025: 39.9 hrs (12 m); PI: F. Lelli (B priority)
18. ALMA 2025: 47.6 hrs (12 m); PI: F. Lelli (C priority)
17. VLA 2024: 173.7 hrs; PI: F. Lelli (Large Program)
16. ALMA 2024: 39.9 hrs (12 m); PI: F. Lelli (B priority)
15. VLA 2024: 101.5 hrs; PI: F. Lelli (Large Program)
14. JWST 2023: 25 hrs; PI: F. Lelli
13. ALMA 2023: 40.4 hrs (12 m); PI: F. Lelli (C priority)
12. VST 2023: 12 nights; PI: F. Lelli
11. ALMA 2022: 28.8 hrs (12 m); PI: Lelli F. (C priority)
10. ALMA 2019: 26.9 hours (12 m); PI: F. Lelli (A priority)
9. ALMA 2018: 7.8 hrs (12 m); PI: F. Lelli (C priority)
8. ALMA 2017: 4.3 hrs (12 m); PI: F. Lelli (A priority)
7. ALMA 2015: 13.4 hrs (12 m); PI: F. Lelli (B priority)
6. GMRT 2015: 24 hrs; PI: F. Lelli
5. VLA 2014: 25 hrs; PI: F. Lelli (B priority)
4. GMRT 2014: 25 hrs; PI: F. Lelli
3. WSRT 2012: 12 hrs; PI: F. Lelli
2. VLA 2012: 17 hrs; PI: F. Lelli (B priority)
1. VLA 2010: 20 hrs; PI: F. Lelli (B priority)

Proposals as CO-I

41. ALMA 2026: 25.2 hrs (12 m); PI: A. Man (C priority)
40. ALMA 2024: 229.9 hrs (12 m); PI: F. Rizzo (Large Program)
39. ALMA 2024: 20.8 hrs (7 m); PI: F. Liang (A priority)
38. ALMA 2024: 49.7 hrs (12 m); PI: L.-H. Lin (A priority)
37. ALMA 2024: 8.6 hrs (12 m); PI: H. Zhang (B priority)
36. ALMA 2024: 14.7 hrs (12 m); PI: T. Williams (C priority)
35. Gemini 2024: 20.8 hrs; PI: A. W. Man
34. Gemini 2024: 20.8 hrs; PI: A. W. Man
33. CFHT 2024: 5.5 hrs; PI: A. Lu (A priority)
32. VST 2024: 100 hrs; PI: C. Tortora
31. VST 2023: 220 hrs; PI: C. Tortora
30. ALMA 2023: 18.2 hrs (7 m); PI: F. Liang (C priority)
29. ALMA 2023: 12.2 hrs (12 m) + 0.3 hrs (JWST); PI: R. Tripodi (A priority)
28. ALMA 2023: 11.2 hrs (7 m) + 26.8 hrs (TP); PI: B. Moncada Cuadri (C priority)

27. ALMA 2023: 8.5 hrs (12 m) + 12.9 hrs (7 m) + 29.8 hrs (TP); PI: B. Moncada Cuadri (C priority)
26. VLT 2023: 73 hrs; PI: A. Concas (B priority)
25. VLT 2023: 5.0 hrs; PI: O. Müller (B priority)
24. CFHT 2023: 5.5 hrs; PI: A. Lu (B priority)
23. Calar Alto 2023: 1 night; PI: M. Querejeta (A priority)
22. VLA 2023: 18 hrs; PI: T. Visgaitis T. (C priority)
21. ALMA 2022: 12.8 hrs (12 m); PI: K. Onishi (B priority)
20. ALMA 2022: 11.2 hrs (7 m)+ 26.8 hrs (TP); PI: B. Moncada Cuadri (C priority)
19. ALMA 2022: 6.5 hrs (12 m); PI: F.-H. Liang (C priority)
18. ALMA 2022: 20.9 hrs (12 m); PI: M. Bureau M. (C priority)
17. ALMA 2022: 8.8 hrs (12 m); PI: T. Williams (C priority)
16. Calar Alto 2022: 1 night; PI: Querejeta M. (A priority)
15. ALMA 2021: 16.2 hrs (12 m); PI: T. Bisbas (B priority)
14. ALMA 2021: 18.3 hrs (12 m); PI: K. Onishi K. (C priority)
13. CFHT 2020: 28.2 hrs; PI: Boyce H. (A priority)
12. ALMA 2019: 16.3 hrs (12 m); PI: T. Bisbas (B priority)
11. ALMA 2019: 11 hrs (12 m); PI: F. Rizzo (C priority)
10. CFHT 2019: 15.7 hrs; PI: L. Posti (B priority)
9. ALMA 2018: 8.1 hrs (12 m); PI: L. Hunt (C priority)
8. Subaru 2018: 2 nights; PI: H. Jerjen
7. GMRT 2018: 65 hrs; PI: F. Fraternali
6. WHT 2018: 3 nights; PI: J. Knapen J.
5. VLA 2018: 25 hrs; PI: J. Janz J. (C priority)
4. VLT 2017: 46 hrs; PI: O. Müller (A & B priority)
3. VLA 2017: 87 hrs; PI: L. Hunt (B & C priority)
2. HST 2016: 8 orbits; PI: P.-A. Duc
1. GMRT 2016: 55 hrs; PI: M. Verheijen

Full talks list

Invited Participation at International Meetings

24. **Review**, “*The sixth Zeldovich meeting*”, Pescara (Italy), 13 - 17 July 2026.
23. **Review**, “*The interplay between gravity and baryons: Insights from low surface brightness galaxies*”, EAS 2026, Lausanne, (Switzerland), 29 June - 3 July 2026.
22. **Review**, “*19th Patras Workshop on Axions, WIMPs and WISPs*”, Patras (Greece), 16-20 September 2024 (declined due to imminent paternity).
21. **Review**, “*IAU General Assembly, Focus Meeting: Measures of luminous and dark matter in galaxies across time*”, Cape Town (South Africa), 6-15 August 2024.
20. **Review**, “*15th International Workshop on the Identification of Dark Matter*”, L'Aquila (Italy), 8-12 July 2024.
19. **Invited Talk**, “*A new dawn of dwarf galaxy research*”, Leiden (The Netherlands), 8-12 April 2024.

18. **Review**, “*The Fourth National Workshop on the SKA Project - Sharpening the Italian science case for the SKAO*”, Catania (Italy), 27 November - 1 December.
17. **Review**, “*IAU Symposium 379: Dynamical Masses of Local Group Galaxies*”, Potsdam (Germany), 20-24 March 2023.
16. **Review**, “*SKA Cosmology SWG Meeting*”, Manchester (UK), 17-19 Jan. 2023.
15. **Lecture (1 hr)**, “*XXXIV International Workshop on High Energy Physics: From Quarks to Galaxies: Elucidating Dark Sides*”, A. A. Logunov Institute for High Energy Physics (online), 22-24 November 2022.
14. **Lecture (1 hr)**, “*Physics School on Ultralight Dark Matter*”, Bad Honnef (Germany), 1-5 August 2022.
13. **Review**, “*The dark matter multi-messenger challenge*”, EAS 2022, Valencia (Spain), 27-28 June 2022.
12. **Review**, “*Extragalactic spectroscopic surveys: past, present and future of galaxy evolution*”, ESO, Santiago (Chile), 12-16 April 2021.
11. **Lectures (3 hr)**, “*Deciphering Dark Matter: From Galaxies to the Universe*”, Summer School, Institut Teknologi Bandung (Indonesia), 14-25 September 2020.
10. **Review**, “*Less Travelled Path for Dark Matter*”, International Centre for Theoretical Sciences (ICTS), Bangalore (India), cancelled due to Covid-19.
9. **Review**, “*Linking gas and star formation throughout cosmic time*”, EAS, Leiden (Netherlands), 30 June - 01 July 2020.
8. **Review**, “*ESO Cosmic Duologues: Dark Matter and MOND*”, ESO online event to celebrate the 100th anniversary of the “Great Debate”, 27 April 2020.
7. **Review**, “*The functioning of galaxies: challenges for Newtonian and Milgromian dynamics*”, Bonn (Germany), 23-27 September 2019.
6. **Review**, “*Cosmology@Malta2019*”, Valletta (Malta), 19-22 March 2019, declined due to other commitments.
5. **Review**, “*Cosmology on small scales 2018*”, Czech Academy of Sciences, Prague (Czech Republic), 26-29 September 2018.
4. **Review**, “*Dark Matter 2018: from the smallest to the largest scales*”, Santander, Spain, 26-30 June 2018.
3. **Lecture (1 hr)**, “*Probing the dark sector and general relativity at all scales*”, CERN TH Institute, Geneva (Switzerland), 14-25 August 2017.
2. **Lecture (1.5 hr)**, “ *Λ CDM, modified gravity or new dark matter models?*”, LTPHE, Paris (France), 29-31 May 2017.
1. **Invited Talk & Session Chair**, “*Dwarf galaxy workshop*”, ESO, Garching bei München (Germany), 10-13 October 2016.

Contributions at International Meetings

44. **Talk**, “*BiCoQ Conference: From Gravity to Particles*”, Milan (Italy), 15-19 June 2026.
43. **Talk**, “*The Drivers of Galaxy Evolution through Cosmic Time*”, Florence (Italy), 8-12 June 2026.
42. **Talk**, “*The Fifth National Workshop on the SKA Proiect*”, Bologna (Italy), 24-28 Nov. 2025.
41. **Talk**, “*PHISCC 2025 workshop*”, Cagliari (Italy), 22-26 Sept. 2025.

40. **Talk**, *"LXVI meeting of the Italian Astronomical Society"*, Firenze (Italy), 3-6 June 2025.
39. **Talk**, *"IAUS 392 Neutral hydrogen in and around galaxies in the SKA era"*, Cape Town (South Africa), 13-15 August 2024.
38. **Talk**, *"IAUS 391 The first chapters of our cosmic history with JWST"*, Cape Town (South Africa), 6-8 August 2024.
37. **Poster**, *"IAUS FM2 A Coherent view of atomic and molecular gas from infrared to radio wavelengths"*, Cape Town (South Africa), 6-7 August 2024.
36. **Talk**, at *"Extreme Galaxies in Extreme Environments"*.
Reykjavik, Iceland, April 29 - May 3 2024
35. **Talk**, at *"Fifth Workshop on Millimetre Astronomy in Italy"*.
Bologna, Italy, 12-14 June 2023
34. **Talk**, at *"Celebrating 40 years of Milgromian dynamics and charting the road ahead"*.
St. Andrews (UK), 5-9 June 2023
33. **Talk**, at *"Dwarf galaxies beyond the Local Group: a new frontier in the era of deep-wide surveys and high-resolution simulations"*.
EAS 2022, Valencia, 30 June 2022
32. **Talk**, at *"Inward bound: bulges from high redshifts to the Milky Way"*.
ESO virtual meeting, 02-06 May 2022
31. **Talk**, at *"The Italian Route to the SKAO Revolution"*.
Virtual meeting, 04-08 October 2021
30. **Talk**, at *"Crossing the characteristic mass scales in galaxy evolution"*.
EAS virtual meeting, 29 June - 3 July 2020
29. **Talk**, at *"The Local Group in context: Galaxies in the local volume as a testbed of cosmology"*.
EAS virtual meeting, 29 June - 3 July 2020
28. **Talk**, at *"Views of the interstellar medium in galaxies in the ALMA era"*.
Bologna (Italy), 2-6 September 2019
27. **Talk**, at *"Galaxy evolution in a new era of HI surveys"*.
MIAPP, Garching bei München (Germany), 1-9 August 2019
26. **Talk**, at *"Nine billion years of neutral gas evolution"*.
ESO, Garching bei München (Germany), 29-31 July 2019
25. **Talk**, at *"Galaxy dynamics in the era of large surveys"*.
Shanghai (China), 1-5 July 2019
24. **Talk**, at *"Birth, life and fate of massive galaxies and their central beating heart"*.
Favignana (Italy), 3-7 September 2018
23. **Talk**, at *"Tensions in the Λ CDM paradigm"*.
Mainz (Germany), 14-18 May 2018
22. **Talk**, at *"Galaxy interactions and mergers across cosmic time"*.
Sexten (Italy), 12-16 March 2018
21. **Talk**, at *"The role of gas in galaxy dynamics"*.
Valletta (Malta), 2-6 October 2017
20. **Talk**, at *"Challenges in galaxy evolution: From black holes to the cosmic web"*.
Florence (Italy), 28 August - 1 September 2017

19. **Talk**, at *"The galaxy ecosystem. Flow of baryons through galaxies"*.
Garching bei München (Germany), 24-28 July 2017
18. **Talk**, at *"In & Out. What rules the galaxy baryon cycle?"*.
Garching bei München (Germany), 26 June -7 July 2017
17. **Talk**, at *"Dwarf galaxies on the shoulders of giants"*.
Cleveland (Ohio), 5-8 June 2017
16. **Talk**, at *"Crossing the Rubicon: The fate of gas flows in galaxies"*.
Santarcangelo di Romagna (Italy), 5-9 September 2016
15. **Talk**, at *"Mapping the pathways of galaxy transformation across time and space"*.
Catalina Island (California), 31 July - 5 August 2016
14. **Talk**, at *"11th Great Lakes Cosmology and Galaxies Workshop"*.
Hamilton (Canada), 19-22 June 2016
13. **Talk**, at *"The journey of dwarf galaxies"*.
EWASS, Tenerife (Spain), 25-26 May 2015
12. **Talk**, at *"Observational anomalies challenging the Λ CDM cosmological model"*.
EWASS, Tenerife (Spain), 22 May 2015
11. **Talk**, at *"3D view on interacting and post-interacting galaxies"*.
EWASS, Tenerife (Spain), 22-23 May 2015
10. **Talk**, at *"Multiwavelength dissection of galaxies"*.
Sydney (Australia), 24-29 May 2015
9. **Talk**, at *"The role of Hydrogen in the evolution of galaxies"*.
Kuching (Malaysia), 15-19 September 2014
8. **Poster**, at *"Galaxy masses as constraints of formation models (IAU Symp. 311)"*.
Oxford (United Kingdom), 21-25 July 2014
7. **Talk**, at *"Dwarf and irregular galaxies: Origins and dynamics (221th AAS meeting)"*.
Long Beach (California), 6-10 January 2013
6. **Talk**, at *"Gas for cosmology in the nearby Universe"*.
EWASS, Rome (Italy), 1-6 July 2012
5. **Talk**, at *"Star formation in dwarf galaxies - Lowell observatory workshop"*.
Flagstaff (Arizona), 19-22 June 2012
4. **Poster**, at *"Galaxy formation: An international conference"*.
Durham (United Kingdom), 18-22 July 2011
3. **Talk**, at *"Dark matter from globular clusters to clusters of galaxies"*.
Bologna (Italy), 27-29 June 2011
2. **Talk**, at *"40th Young European Radio Astronomers Conference (YERAC)"*.
Alcala de Henares (Spain), 5-8 July 2010
1. **Talk**, at *"Dark haloes from smallest to largest scales"*.
Bologna (Italy), 29-30 June 2009

Invited Colloquia at International Institutes

29. Arcetri Astrophysical Observatory, Firenze (Italy), March 2026
28. University of Bologna, Bologna (Italy), February 2026
27. Gran Sasso National Laboratories, Aquila (Italy), September 2025
26. Univeristy of Florence, Theory Group, Firenze (Italy), May 2025
25. Indian Institute of Technology, Hyderabad (India), March 2025

24. CEICO and FZU, Prague (Czech), March 2024
23. Trieste Astronomical Observatory, Trieste (Italy), September 2023
22. ASTRON, Dwingeloo (Netherlands), May 2023
21. Collaborative Research Center “Neutrinos and Dark Matter in Astro- and Particle Physics”, Garching bei München (Germany), April 2023
20. Strasbourg Observatory, Strasbourg (France), December 2022
19. University of São Paulo, São Paulo (Brazil), May 2022
18. Kavli IPMU, University of Tokyo, Tokyo (Japan), April 2022
17. Cagliari Astronomical Observatory, Cagliari (Italy), April 2022
16. University of Nottingham, Nottingham (UK), June 2021
15. Nanjing University, Nanjing (China), May 2020
14. Kapteyn Astronomical Institute, Groningen (Netherlands), January 2020
13. Knowledge Exchange Series (KES), ESO (Germany), February 2019
12. AIP, Potsdam (Germany), September 2017
11. Strasbourg Observatory, Strasbourg (France), May 2017
10. University of Basel, Basel (Switzerland), April 2017
9. Arcetri Astrophysical Observatory (INAF), Florence (Italy), March 2017
8. Virtual Institute of Astroparticle Physics (VIA), December 2016
7. University of Rochester, Rochester (USA), November 2016
6. University of Wisconsin-Madison, Madison (USA), February 2016
5. Indiana University, Bloomington (USA), October 2015
4. Mount Stromlo Observatory, Canberra (Australia), June 2015
3. Australia Telescope National Facility, Sydney (Australia), May 2015
2. Kapteyn Astronomical Institute, Groningen (Netherlands), Dec. 2013
1. Case Western Reserve University, Cleveland (USA), January 2013

Other talks

37. Extragalactic Meeting, INAF & University of Florence, Florence, October 2024
36. ESO Lunch Talk, ESO Germany, October 2023
35. Extragal@100, INAF & University of Florence, Florence, October 2023
34. Extragalactic Meeting, INAF & University of Florence, Florence, February 2023
33. ESO Galaxy Evolution Coffee, February 2023
32. SKA Tully-Fisher Relation Task Force, on-line, December 2022
31. ESO Galaxy Evolution Coffee, September 2022
30. CASPER/GNOME meeting, on-line, May 2021
29. Lunch Talk, Arcetri Astrophysical Observatory, Florence (Italy), May 2021
28. Informal Discussion, Harvard University, Cambridge (USA), July 2020
27. Seminar, Oxford University, Oxford (UK), May 2020
26. Lunch Talk, Cardiff University, Cardiff (UK), May 2020
25. Seminar, Kavli Institute for Cosmology, Cambridge (UK), November 2019
24. Seminar, ESO, Santiago (Chile), August 2018
23. Informal Discussion, ESO, Garching bei München (Germany), October 2018
22. Informal Discussion, ESO, Garching bei München (Germany), July 2018

21. Lunch Talk, Kapteyn Astronomical Institute, Groningen (Netherlands), Feb. 2017
20. Lunch Talk, ESO, Garching bei München (Germany), February 2017
19. Lunch Talk, Case Western Reserve University, Cleveland (USA), November 2016
18. Seminar, Institute of Astronomy, Cambridge (UK), July 2015
17. Seminar, Swinburne University, Melbourne (Australia), June 2015
16. Seminar, Pennsylvania State University, State College (USA), March 2015
15. Seminar, Observatory of Florence (INAF), & Florence (Italy), December 2014
14. HI Meeting, ASTRON, Dwingeloo (Netherlands), April 2013
13. Seminar, ASTRON, Dwingeloo (Netherlands), January 2013
12. Seminar, Leiden Observatory, Leiden (Netherlands), January 2013
11. Seminar, Columbia University, New York (USA), January 2013
10. Seminar, National Radio Astronomy Observatory, Socorro (USA), January 2013
9. Seminar, University of California, Santa Barbara (USA), January 2013
8. Seminar, University of Bologna, Bologna (Italy), October 2012
7. Lunch Talk, Kapteyn Astronomical Institute, Groningen (Netherlands), Sept. 2011
6. DART Meeting, ISSI, Bern (Switzerland), September 2011
5. Local Group Meeting, University of Bologna, Bologna (Italy), June 2011
4. HI meeting, ASTRON, Dwingeloo (Netherlands), May 2011
3. Lunch Talk, Kapteyn Astronomical Institute, Groningen (Netherlands), June 2010
2. Master Graduation, University of Bologna, Bologna (Italy), October 2009
1. Prospective PhD Symposia, Leiden Observatory, Leiden (Netherlands), Feb. 2009

Full Publications List

Papers as first author

23. **Lelli F.**, Marasco A., Davis T. A. and 8 co-authors “*Testing dark matter models and modified gravity theories with spatially resolved HI observations*”, **2026**, Advancing Astrophysics with the SKA II (AASKAII), 2026
22. **Lelli F.** “*Gas-rich “ultra-diffuse” galaxies are consistent with the baryonic Tully-Fisher relation and with Milgromian dynamics*”, **2024**, A&A, 689, 3L
21. **Lelli F.**, Zhang Z.-Y., Bisbas T. G. and 6 co-authors “*Cold gas disks in main-sequence galaxies at cosmic noon: Low turbulence, flat rotation curves, and disk-halo degeneracy*”, **2023**, A&A, 672, 106
20. **Lelli F.**, Davis T. A., Bureau M. and 5 co-authors “*WISDOM Project – XIII. Feeding molecular gas to the supermassive black hole in the starburst AGN-host galaxy Fairall 49*”, **2022**, MNRAS, 516, 4066
19. **Lelli F.** “*Gas Dynamics in Dwarf Galaxies*”, **2022**, Nature Astronomy, invited review, 6, 35
18. **Lelli F.**, Di Teodoro E. M., Fraternali F. and 5 co-authors “*A massive stellar bulge in a regularly rotating galaxy 1.2 billion years after the Big Bang*”, **2021**, Science, 371, 713
17. **Lelli F.**, McGaugh S.S., Schombert J.M., Desmond H., Katz H. “*The baryonic Tully-Fisher relation for different velocity definitions and implications for galaxy angular momentum*”, **2019**, MNRAS, 484, 3267

16. **Lelli F.**, De Breuck C., Falkendal T. and 4 co-authors “*Neutral versus ionized gas kinematics at $z \simeq 2.6$: The AGN-host starburst galaxy PKS 0529-549*”, **2018**, MNRAS, 479, 5440
15. **Lelli F.**, McGaugh S.S., Schombert J.M. “*Testing Verlinde’s emergent gravity with the radial acceleration relation*”, **2017**, MNRAS, 468, L68
14. **Lelli F.**, McGaugh S.S., Schombert J.M., Pawlowski M.S. “*One law to rule them all: The radial acceleration relation of galaxies*”, **2017**, ApJ, 836, 152
13. **Lelli F.**, McGaugh S.S., Schombert J.M., Pawlowski M.S. “*The relation between stellar and dynamical surface densities in the central regions of disk galaxies*”, **2016**, ApJL, 827, 19
12. **Lelli F.**, McGaugh S.S., Schombert J.M. “*SPARC: Mass models for 175 disk galaxies with Spitzer Photometry and Accurate Rotation Curves*”, **2016**, AJ, 152, 157
11. **Lelli F.**, McGaugh S.S., Schombert J.M. “*The small scatter of the baryonic Tully-Fisher relation*”, **2016**, ApJL, 816, L14
10. **Lelli F.**, Duc P.-A., Brinks E., McGaugh S.S. “*Tidal dwarf galaxies: Disc formation at $z = 0$* ”, **2015**, Galaxies, 3, 184. Special issue “3D View on Interacting and Post-Interacting Galaxies from Clusters to Voids”.
9. **Lelli F.**, Duc P.-A., Brinks E. and 9 co-authors “*Gas dynamics in tidal dwarf galaxies: Disc formation at $z = 0$* ”, **2015**, A&A, 584, A113
8. **Lelli F.**, Verheijen M.A.W., Fraternali F. “*The triggering of starbursts in low-mass galaxies*”, **2014**, MNRAS, 445, 1694
7. **Lelli F.** “*The inner regions of disc galaxies: A constant baryonic fraction?*”, **2014**, Galaxies, 2, 292. Special issue “Beyond Standard Gravity and Cosmology”.
6. **Lelli F.**, Verheijen M.A.W., Fraternali F. “*Dynamics of starbursting dwarf galaxies. III. A HI study of 18 nearby objects*”, **2014**, A&A, 566, A71
5. **Lelli F.**, Fraternali F., Verheijen M.A.W. “*Evolution of dwarf galaxies: A dynamical perspective*”, **2014**, A&A, 563, A27
4. **Lelli F.**, Fraternali F., Verheijen M.A.W. “*A scaling relation for disc galaxies: Circular-velocity gradient versus central surface brightness*”, **2013**, MNRAS, 433, L30
3. **Lelli F.**, Verheijen M.A.W., Fraternali F., Sancisi R. “*Dynamics of starbursting dwarf galaxies. II. UGC 4483*”, **2012**, A&A, 544, A145
2. **Lelli F.**, Verheijen M.A.W., Fraternali F., Sancisi R. “*Dynamics of starbursting dwarf galaxies: I Zw 18*”, **2012**, A&A, 537, A72
1. **Lelli F.**, Fraternali F., Sancisi R. “*Structure and dynamics of giant low surface brightness galaxies*”, **2010**, A&A, 516, A11

Papers led by supervised students

16. Haubner K., **Lelli F.**, Di Teodoro E., and 13 co-authors “*HI rotation curves and mass-size relation for 568 galaxies from the APTIF wide-area extragalactic survey*”, **2026**, A&A, in press
15. Hua Z., **Lelli F.**, Di Teodoro E., McGaugh S.S., Schombert J.M. “*The baryonic mass-size relation of galaxies. II. Implications for the evolutionary paths between star-forming and passive galaxies*”, **2026**, A&A, 707, A292

14. Hua Z., **Lelli F.**, Di Teodoro E., McGaugh S.S., Schombert J.M. "*The baryonic mass-size relation of galaxies. I. A dichotomy in star-forming galaxy disks*", **2025**, A&A, 703, A223
13. Haubner K., **Lelli F.**, Di Teodoro E., Duey F., McGaugh S.S., Schombert J.M. "*On the uncertainties of galaxy distances from flow models*", **2025**, A&A, 696, 185
12. Lin L., **Lelli F.**, De Breuck C., and 9 co-authors "*Gas dynamics in an AGN-host galaxy at z 2.6: Regular rotation, noncircular motions, and mass models*", **2024**, A&A, in press
11. Kelleher R. & **Lelli F.** "*Galaxy clusters in Milgromian dynamics: Missing matter, the external field effect, and hydrostatic bias*", **2024**, A&A, 688, 78
10. Kovakkuni N., **Lelli F.**, Duc P.-A. and 12 co-authors "*Molecular and Ionized Gas in Tidal Dwarf Galaxies: The Spatially Resolved Star-formation Relation*", **2023**, MNRAS, 526, 1940
9. Tripodi R., **Lelli F.**, Feruglio C., Fiore F., Fontanot F., Bischetti M., and Maiolino R. "*Dynamical signature of a stellar bulge in a quasar host galaxy at $z \simeq 6$* ", **2023**, A&A, 671, 44
8. Li P., **Lelli F.**, McGaugh S.S., Schombert J.M., Chae K.-H. "*A cautionary tale in fitting galaxy rotation curves with Bayesian techniques: does Newton's constant vary from galaxy to galaxy?*", **2021**, A&A, 646, L13
7. Shelest, A. & **Lelli F.** "*From spirals to lenticulars: evidence from the rotation curves and mass models of three early-type galaxies*", **2020**, A&A, 641, 31
6. Petersen, J. & **Lelli F.** "*A first attempt to differentiate between modified gravity and modified inertia with galaxy rotation curves*", **2020**, A&A, 636, 56
5. Li P., **Lelli F.**, McGaugh S.S., Schombert J.M. "*A comprehensive catalog of dark matter halo models for SPARC galaxies*", **2020**, ApJS, 247, 31
4. Li P., **Lelli F.**, McGaugh S.S., Pawlowski M., Zwaan M., Schombert J.M. "*The halo mass function of late-type galaxies from HI kinematics*", **2019**, ApJL, 886, 11
3. Li P., **Lelli F.**, McGaugh S.S., Starkman N., Schombert J.M. "*A constant characteristic volume density of dark matter haloes from SPARC rotation curve fits*", **2019**, MNRAS, 482, 5106
2. Starkman N., **Lelli F.**, McGaugh S.S., Schombert J.M. "*A new algorithm to quantify maximum discs in galaxies*", **2018**, MNRAS, 480, 2292
1. Li P., **Lelli F.**, McGaugh S.S., Schombert J.M. "*Fitting the radial acceleration relation to individual SPARC galaxies*", **2018**, A&A, 615, A3

Papers as second author

11. Tian Y., **Lelli F.**, Pawlowski M. and 7 co-authors "*The Baryonic Faber-Jackson Relation and Fundamental Plane of Galaxy Groups, Elliptical Galaxies, and Dwarf Galaxies*", **2026**, A&A, 710, L39
10. Misteale T., **Lelli F.**, McGaugh S. S., Schombert J. M., Famaey B. "*Mass models of galaxy clusters from a non-parametric weak-lensing reconstruction*", **2025**, Open Journal of Astrophysics, 8, 132
9. Chae K.-H., **Lelli F.**, Desmond H., McGaugh S.S., Schombert J.M. "*Testing Modified Gravity Theories with Numerical Solutions of the External Field Effect in Rotationally Supported Galaxies*", **2022**, PhRvD, 106, 103025

8. Müller O., **Lelli F.**, Famaey B., and 5 co-authors “*The Cen A galaxy group: dynamical mass and missing baryons*”, **2022**, A&A, 662, 57
7. McGaugh S.S., **Lelli F.**, Schombert J.M., and 4 co-authors “*The Baryonic Tully-Fisher Relation in the Local Group and the Equivalent Circular Velocity of Pressure Supported Dwarfs*”, **2021**, AJ, 162, 202
6. Querejeta M., **Lelli F.**, Schinnerer E. and 12 co-authors “*ALMA Resolves Giant Molecular Clouds in a Tidal Dwarf Galaxy*”, **2021**, A&A, 645, A97
5. Chae K.-H., **Lelli F.**, Desmond H., McGaugh S.S., Li P., Schombert J.M. “*Testing the Strong Equivalence Principle: Detection of the External Field Effect in Rotationally Supported Galaxies*”, **2020**, ApJ, 904, 51
4. Katz H., **Lelli F.**, McGaugh S.S., Di Cintio A., Brook C.B., Schombert J.M. “*Testing feedback-modified dark matter haloes with galaxy rotation curves: Estimation of halo parameters and consistency with Λ CDM*”, **2017**, MNRAS, 466, 1648
3. McGaugh S.S., **Lelli F.**, Schombert J.M. “*The radial acceleration relation in rotationally supported galaxies*”, **2016**, Physical Review Letters, 117, 201101
2. Di Cintio A. & **Lelli F.** “*The mass discrepancy acceleration relation in a Λ CDM context*”, **2016**, MNRAS, 456, L127
1. McQuinn K.B.W., **Lelli F.**, Skillman E.D., Dolphin A.E., McGaugh S.S., Williams B.F. “*The link between mass distribution and starbursts in dwarf galaxies*”, **2015**, MNRAS, 450, 3886

Papers as third author

15. Huang H.-T., Man A.W.S., **Lelli F.**, and 7 co-authors “*Molecular gas mass measurements of an active, starburst galaxy at $z \simeq 2.6$ using ALMA observations of [CI], CO and dust emission*”, **2024**, ApJ, 977, 251
14. McGaugh S.S., Schombert J.M., **Lelli F.**, and J. Frank “*Accelerated Structure Formation: the Early Emergence of Massive Galaxies and Clusters of Galaxies*”, **2024**, ApJ, 976, 13
13. Mistele T., McGaugh S. S., **Lelli F.**, Schombert J. M., Li P. “*Indefinitely Flat Circular Velocities and the Baryonic Tully-Fisher Relation from Weak Lensing*”, **2024**, ApJ, 969, 3
12. Mistele T., McGaugh S. S., **Lelli F.**, Schombert J. M., Li P. “*Radial acceleration relation of galaxies with joint kinematic and weak-lensing data*”, **2024**, JCAP, 2024, id.020
11. Hunt L., Belfiore F., **Lelli F.**, and 19 co-authors “*Gas, dust, and the CO-to-molecular gas conversion factor in low-metallicity starbursts*”, **2023**, A&A, 675, 74
10. Li P., McGaugh S.S., **Lelli F.**, Schombert J.M., Pawlowski M.S. “*Incorporating baryon-driven contraction of dark matter halos in rotation curve fits*”, **2022**, A&A, 665, 143
9. Li P., McGaugh S.S., **Lelli F.**, Yong. T, Schombert J.M., Ko C.-M. “*The Effect of Adiabatic Compression on Dark Matter Halos and the Radial Acceleration Relation*”, **2022**, ApJ, 927, 198
8. Schombert J.M., McGaugh S.S., **Lelli F.** “*Stellar Mass-to-light Ratios: Composite Bulge+Disk Models and the Baryonic Tully-FisherRelation*”, **2022**, AJ, 163, 154
7. Chae K.-H., Desmond H., **Lelli F.**, McGaugh S.S., Schombert J.M. “*Testing the Strong Equivalence Principle. II. Relating the External Field Effect in Galaxy Rotation Curves to the Large-Scale Structure of the Universe*”, **2021**, ApJ, 921, 104

6. Müller O., Pawlowski M. S., **Lelli F.** and 6 co-authors “*The coherent motion of Cen A dwarf satellite galaxies remains a challenge for Λ CDM cosmology*”, **2021**, A&A, 645, L5
5. Schombert J.M., McGaugh S.S., **Lelli F.** “*Using the baryonic Tully-Fisher relation to measure H_0* ”, **2020**, ApJ, 160, 71
4. Desmond H., Katz H., **Lelli F.**, McGaugh S.S. “*Uncorrelated velocity and size residuals across galaxy rotation curves*”, **2019**, MNRAS, 484, 239
3. Schombert J.M., McGaugh S.S., **Lelli F.** “*The mass-to-light ratios and the star-formation histories of disk galaxies*”, **2019**, MNRAS, 483, 1496
2. Katz H., Desmond H., **Lelli F.**, and 4 co-authors “*Stellar feedback and the energy budget of late-type galaxies: Missing baryons and core creation*”, **2018**, MNRAS, 480, 4287
1. McGaugh S.S., Schombert J.M., **Lelli F.** “*The star-forming main sequence of dwarf low surface brightness galaxies*”, **2017**, ApJ, 851, 22

Papers as contributing author

29. Lee S. et al. (including **Lelli F.**) “*WALLABY pilot survey: HI depletion times within the stellar discs of nearby galaxies*”, MNRAS, 548, 660
28. Dominiak P. et al. (including **Lelli F.**) “*WISDOM Project – XXVIII. Molecular gas measurement of the supermassive black hole mass of the galaxy NGC 1387*”, **2026**, MNRAS, 548, 546
27. McGaugh S.S., Mistele T., Duey F., Haubner K., **Lelli F.**, Schombert J. M., Li P. “*The Baryonic Mass–Halo Mass Relation of Extragalactic Systems*”, **2026**, ApJ, 1001, 65
26. Zhang H. and 7 co-authors (including **Lelli F.**) “*Improving the CO-dynamical supermassive black hole mass measurement in the galaxy NGC 1574 using high spatial resolution ALMA observations*”, **2025**, MNRAS, 541, 2540
25. Müller O., Rejkuba M., Fahrion K. et al. (including **Lelli F.**) “*MUSE observations of dwarf galaxies and a stellar stream in the M83 group*”, **2025**, A&A, 699, 207
24. Duey F., Schombert J.M., McGaugh S.S., **Lelli F.** “*The Baryonic Tully-Fisher Relation II: Stellar Mass Models*”, **2024**, AJ, 169, 186
23. Zhang H. and 10 co-authors (including **Lelli F.**) “*WISDOM project – XXIV. A 5% precision CO-dynamical supermassive black hole mass measurement in the galaxy NGC 383*”, **2024**, MNRAS, 537, 520
22. Murugesan C., Deg N., Westmeier T. and 20 co-authors (including **Lelli F.**) “*WALLABY Pilot Survey: Public data release of 1800 HI sources and high-resolution cut-outs from Pilot Survey Phase 2*”, **2024**, PASA, 41, 88
21. Bacchini C., Nipoti C., Iorio G. and 6 co-authors (including **Lelli F.**) “*A 3D view on the local gravitational instability of cold gas discs in star-forming galaxies at $0 \leq z \leq 5$* ”, **2024**, A&A, 687, 115
20. Duey F., Schombert J.M., McGaugh S.S., **Lelli F.** “*The Baryonic Tully-Fisher Relation I: WISE/Spitzer Photometry*”, **2024**, AJ, 168, 19
19. Müller O., Heesters N., Pawlowski M. S., Kanehisa K. J. **Lelli F.** & Libeskind N. “*The phase-space distribution of the M81 satellite system*”, **2024**, A&A, 683, 250
18. Ruffa I. and 13 co-authors (including **Lelli F.**) “*A fundamental plane of black hole accretion at millimetre wavelengths*”, **2024**, MNRAS, 528, 76

17. Liang E. and 12 co-authors (including **Lelli F.**) “*WISDOM project – XVIII. Molecular gas distributions and kinematics of three megamaser galaxies*”, **2024**, MNRAS, 527, 9343
16. Crosby E., Jerjen H., Müller O., Pawlowski M. S., Mateo M. and **Lelli F.** “*New dwarf galaxy candidates in the sphere of influence of the Sombrero galaxy*”, **2024**, MNRAS, 527, 9118
15. Li P., Tian Y., Mariana J. P., Pawlowski M. S., **Lelli F.**, McGaugh S.S., Schombert J.M., Read J. I., Yu P.-C., Ko C.-M. “*Measuring galaxy cluster mass profiles into low acceleration regions with galaxy kinematics*”, **2023**, A&A, 677, 24
14. Ruffa I. and 12 co-authors (including **Lelli F.**) “*WISDOM project - XVI. SMBH mass in the early-type galaxies NGC0612, NGC1574, and NGC4261 from CO dynamical modelling*”, **2023**, MNRAS, 522, 6170
13. Marasco A., Belfiore F., Cresci G., **Lelli F.**, and 11 co-authors “*Shaken, but not expelled: Gentle baryonic feedback from nearby starburst dwarf galaxies*”, **2023**, A&A, 670, 92
12. Deg N. and 30 co-authors (including **Lelli F.**) “*WALLABY Pilot Survey: Public release of HI kinematic models for more than 100 galaxies from phase 1 of ASKAP pilot observations*”, **2022**, PASA, 39, 59
11. Davis T. and 14 co-authors (including **Lelli F.**) “*WISDOM Project – X. The morphology of the molecular ISM in galaxy centres and its dependence on galaxy structure*”, **2022**, MNRAS, 512, 1522
10. Wong I. and 37 co-authors (including **Lelli F.**) “*WALLABY pre-pilot survey: Two dark clouds in the vicinity of NGC 1395*”, **2021**, MNRAS, 507, 2905
9. Müller O., Fahrion K., Rejkuba M., Hilker M., **Lelli F.** and 5 co-authors “*The properties of dwarf spheroidal galaxies in the Cen A group: Stellar populations, internal dynamics, and a heart-shaped H α ring*”, **2021**, A&A, 645, A92
8. Davis T. and 16 co-authors (including **Lelli F.**) “*Revealing the intermediate-mass black hole at the heart of the dwarf galaxy NGC 404 with sub-parsec resolution ALMA observations*”, **2020**, MNRAS, 496, 4061
7. Fahrion, K. and 8 co-authors (including **Lelli F.**) “*Metal-poor nuclear star clusters in two dwarf galaxies near Centaurus A suggesting formation from the in-spiraling of globular clusters*”, **2020**, A&A, 634, 53
6. Müller O., Rejkuba M., Pawlowski M.S., Ibata R., **Lelli F.**, Hilker M., Jerjen H. “*The dwarf galaxy satellite system of Centaurus A*”, **2019**, A&A, 629, 18
5. Fensch J. and 11 co-authors (including **Lelli F.**) “*Massive star cluster formation and evolution in tidal dwarf galaxies*”, **2019**, A&A, 628, 60
4. Emsellem E. and 17 co-authors (including **Lelli F.**) “*The ultra-diffuse galaxy NGC 1052-DF2 with MUSE: I. Kinematics of the stellar body*”, **2019**, A&A, 625, 76
3. Katz. H., Desmond H., McGaugh S.S., **Lelli F.** “*The tight empirical relation between dark matter halo mass and flat rotation velocity for late-type galaxies*”, **2019**, MNRAS, 483, 98
2. Müller O., Pawlowski M.S., Jerjen. H., **Lelli F.** “*A whirling plane of satellite galaxies around Cen A challenges cold dark matter cosmology*”, **2018**, Science, 359, 534
1. Lisenfeld U. and 7 co-authors (including **Lelli F.**) “*Molecular gas and star formation in the tidal dwarf galaxy VCC 2062*”, **2016**, A&A, 590, 92

Proceedings, Commentaries & Research Notes

9. **Lelli F.**, Mistele T., McGaugh S.S., Schombert J.M., Li P. "*The empirical laws of galaxy dynamics: from gas kinematics to weak gravitational lensing*", **2026, invited review**. Astronomy in Focus as presented at the IAU XXXII General Assembly, 2024. Proceedings of the International Astronomical Union; D. Worrall, editor., Volume 20, Issue A32, pp. 419-425.
8. Haubner K., **Lelli F.**, Di Teodoro E., Duey F., McGaugh S.S., Schombert J.M. "*SPARC-4k: The new SPARC database*", **2026**. Proceedings of the International Astronomical Union; D. Pisano et al., editors., Volume 20, Issue S392, pp. 119-125.
7. **Lelli F.** "*Mass Models of Disk Galaxies from Gas Dynamics*", **2025, invited review**. Proceedings of the International Astronomical Union; P. Bonifacio et al., editors., Volume 379, pp. 335-346.
6. Beccari G. and 9 co-authors (including **F. Lelli**) "*Report on the ESO Workshop The Present and Future of Astronomy (ASTRO2022)*", **2022**, *The Messenger*, 187, 33
5. McGaugh S.S., **Lelli F.**, and Schombert J. "*Scaling Relations for Molecular Gas and Metallicity: Impact on the Baryonic Tully-Fisher Relation*", **2020**, Research Notes of the AAS, Vol. 4, id.45
4. McGaugh S.S., **Lelli F.**, Li P. and Schombert J. "*Dynamical regularities in galaxies*", **2020, invited review**. Proceedings of the International Astronomical Union, Volume 353, pp. 144-151.
3. Manara C. F. and 19 co-authors (including **Lelli F.**) "*The ESO Summer Research Programme 2019*", **2019**, *The Messenger*, 178, 57
2. McGaugh S.S., Li P., **Lelli F.**, Schombert J.M. "*Presence of a fundamental acceleration scale in galaxies*", **2018**, *Nature Astronomy*, 2, 924
1. McGaugh S.S., **Lelli F.**, Pawlowski M. and 21 co-authors, *Comment on "Evidence for dark matter in the inner Milky Way"*, **2015**, arXiv:1503.07813

October 1, 2026

