

- **Personal Informations**

Place of Birth Bagnères de Bigorre, France
Citizenship Italian
Mother Tongues Italian & French
Other Languages English
E-mail m.sarzi@herts.ac.uk
Web <http://star-www.herts.ac.uk/~sarzi>

- **Education**

Jan. 2002 Ph.D. in Astronomy at the University of Padova, Italy. *Dissertation title*: “The Environment of Disk Galaxies Central Regions”
Oct. 1997 “Laurea” in Astronomia (equivalent to M.Sc.) at the University of Padova, Italy. *Dissertation title*: “Modelli dinamici di galassie a disco” (*Dynamical Models for Disk galaxies*).

- **Employment Record**

Nov. 2016 - Reader, University of Hertfordshire.
Sep. 2014 - Oct 2016 Senior Lecturer, University of Hertfordshire.
Oct. 2013 - Aug. 2014 Lecturer, University of Hertfordshire.
Oct. 2008 - Sep. 2013 STFC Advanced Fellow , University of Hertfordshire.
Oct. 2005 - Sep. 2008 University Research Fellow, University of Hertfordshire.
Nov. 2002 - Sep. 2005 Postgraduate Research Assistant, Oxford University.
Nov. 2001 - Oct. 2002 Postgraduate Research Assistant, Durham University.

- **Research Interests**

- Stellar Populations and Interstellar Medium in Galaxies
- Galactic Nuclei and Supermassive Black Holes
- Galactic Dynamics and Dark Matter

- **Esteem**

- **Awards**

2013 Royal Astronomical Society Group Achievement Award for the SAURON team
2011 Beatrice Tinsley Scholar Award, University of Texas

- **Fellowships**

2016 ESO Visiting Fellowship - £4k
2014 STFC Public Engagement Fellowship - £120k
2012 ESO Visiting Fellowship - £10k
2009 ESO Visiting Fellowship - £4k
2008 STFC Advanced Fellowship - £350k

– Refereeing and Committees

- 2014 - Referee for two Newton Fund Advanced Fellowship (each worth £40k), five STFC Rutherford fellowships (each worth £350k), two RAS fellowships (£150k each) two Austrian Ph.D. research grants (140k euro each), a Dutch VENI fellowship (250k euro), an Austrian Elise Richter fellowship (260k euro), an NSF Mid-Scale Innovation Program (worth \$19m) and two STFC Research Grants (£120k each).
- 2010 - 2012 Member of the Gemini UK Telescope Time Allocation Group.
- 2010 - External Examiner for Ph.D. Vivas. Sebastian Comeron (IAC, Jun. 2010), Caroline Scott (Imperial, Dec 2014), Francesco Belfiore (Cambridge, Apr. 2017)
- 2006 Member of the Isaac Newton Group of Telescopes Time Allocation Group.
- 2004 - Regular Referee for ApJ, AJ, MNRAS, A&A and Nature (~ 50 articles).
- 2004 - 2010 Regular Referee for observing proposals at the WHT and Gemini telescopes.

– Invited Talks at International Conferences

- Jul. 2013 Guillermo Haro Workshop: *Galaxy Structure & Evolution through integral-field spectroscopy: next generation surveys* (Puebla, Mexico).
- Jan. 2013 Observatoire de Paris Workshop: *Shaping Galaxy Evolution: Galaxy Interaction & Feedback* (Paris, France).
- May 2012 STScI May Symposium: *Gas Flows in Galaxies* (Baltimore, USA).
- Oct. 2012 KMOS OPINAS workshop (Ringberg, Germany): *Nebular Emission in Early-type Galaxies, Diffuse Gas and Planetary Nebulae*.

– Invited Seminars, Lectures & Workshops

- Aug. 2010 Invited Lecturer at the Summer School *Molecules in Galaxies*, Oxford
- 2010 - Invited Seminars in the last 7 years. Cambridge IoA (Feb 2011), Strasbourg (Feb 2011), University of Texas (Oct 2011), Imperial MSSL (Dec 2011), Meudon Observatory (Jan 2012), UCL (Mar 2012), Ghent (Feb 2014), Liverpool (Mar 2016), Belfast (Apr 2016), Cambridge (May 2017), Naples & Cardiff (Oct. 2017).
- 2006 - Invited Participant to exclusive Lorentz Center Workshops (Leiden, The Netherland) on *Decoding the Assembly History of Galaxies* (Oct 2014, not attended), *The P.N.S.: Future Projects and Ideas* (Feb. 2013), *Powerful Radio Galaxies* (Nov. 2009), and *Galactic Nuclei* (Jul. 2009).

• Teaching and Supervising

– Undergraduate Teaching

- 2016/2017 Module leader for Investigations in Physics & Astronomy.
- 2015/2016 Mathematic Techniques II. Teaching, tutoring & marking. Module leader for Investigations in Physics & Astronomy.
- 2014/2015 Module leader of Mathematic Techniques II and Investigations in Physics & Astronomy. Tutoring for Contemporary Physics.
- 2013/2014 Module leader of Mathematic Techniques II. Module leader and module design for the new Investigations in Physics & Astronomy. Tutoring for Contemporary Physics.
- 2012/2013 Tutoring & marking for the Mathematic Techniques II.
- 2011/2012 Tutoring & marking for the Mathematic Techniques II.
- 2009/2010 Tutoring & marking for Analytic Techniques.
- 2003/2004 Tutoring & marking for Astrophysics courses (Oxford).

– Graduate Teaching

- Apr. 2017 Invited Lectures on *Extragalactic Astronomy with Integral-Field Spectroscopy* to Astronomy graduate students at University of Padua.
- Aug. 2010 Invited Lectures on *Ionised Gas in Galaxies* to Astronomy graduate students attending the Summer School *Molecules in Galaxies*, Oxford.
- 2005 - Lectures on *The structure of Galactic Nuclei* to Astronomy graduate students at the University of Padova (Dec. 2005, Apr. 2008 and Mar. 2009), the University of Hertfordshire (from Mar. 2008 onward) and Yonsei University (May 2009).

– Supervising

- 2017 - UH – Ph.D. Thesis of Thomas Spriggs: *Planetary Nebulae in the optical regions of early-type galaxies with MUSE*.
- 2015 - UH – Ph.D. Thesis of Boris Nedelchev: *Dissecting the Star-Formation History of Nearby Galaxies with MUSE*.
- 2014 - 2015 UH – MSc Thesis of Boris Nedelchev: *On the Nature of the NaD Absorption Excess in Nearby Galaxies*
- 2014 UH – SEPnet summer student. The results of this project were published in Sarzi et al. (2016).
- 2008 - 2014 UH – Ph.D Thesis of Hugo Ledo: *Central Discs as Tracers of Galaxy Assembly*. 1st chapter published in Ledo et al. (2010), 2nd chapter published in Sarzi, Ledo & Dotti (2015), 3rd chapter published as Sarzi, Ledo et al. (2016).
- 2013 IAP, Paris – Stage L3 summer student from the Ecole Normale Supérieure de Lyon.
- 2009 - UH – One 3rd-year 30 credits student projects in 2009/10, three in 2010/11, one in 2013/14. On MPhys student in 2014/15
- 2007 - 2008 UH – MSc Thesis of Hugo Ledo: *A Census of Nuclear Disks in Early-Type Galaxies*.
- 2004, 2005 Oxford – Five 4th-year student projects. All received A-class marks, three were nominated for prizes, and one was awarded. Two of these students were admitted to Ph.D. programs (Aidan Crook, MIT; James Aird, Imperial), while discussing these projects at their interview.

– Co-Supervising

- 2005 - 2006 UH – Ph.D Thesis of Emma Allard on *The Physical Properties of Nuclear Rings in Galaxies*. Chapters published in Allard et al. (2006) and in Sarzi, Allard et al. (2007).
- Summer 2003 Oxford – MSc Thesis of Maëla Collobert on *Spectroscopy of Isolated Early-type Galaxies*, published in Collobert, Sarzi et al. (2006).

– Advising

- summer 2012 UH – supervising summer project of N. Pastorello (from Padova, Ph.D in Swinburne till 2016), published in Pastorello, Sarzi et al. (2013).
- 2009 - 2010 Yonsei, Korea – supervising key chapter of the Ph.D. thesis of K. Oh (from Yonsei, now at the ETH in Zürich), published in Oh, Sarzi et al. (2011).
- 2007 UH – supervising key chapter of the Ph.D. thesis of A. Beifiori (from Padova, now at MPE Garching), published in Beifiori, Sarzi et al. (2009).
- 2005 UH – supervising key chapter of the Ph.D. thesis of L. Mazzuca (from NASA, still there), published in Mazzuca, Sarzi et al. (2006).
- 2004 Oxford – supervising key chapter of the Ph.D. thesis of L. Coccato (from Padova, now ESO staff), published in Coccato, Sarzi et al. (2006).

• Outreach

- Jul. 2015* Invited Speaker at the STFC Open Week in Harwell.
- May 2015* Organiser of a special event at Bayfordbury in conjunction with the St. Albans Film Festival.
- May 2015* Contribution to BBC Focus article on the top discoveries of the Hubble Space Telescope.
- Feb 2015* Interview on the Naked Scientist on supermassive black holes.
- Sep. 2014 -* Member of the UH Public Engagement steering group.
- Sep. 2014 -* Over 20 stargazing events at schools, as part of my STFC Public Engagement program.
- Jan. 2014* Invited Panel Expert at the Norwich BBC Stargazing LIVE event.
- Mar. 2013* Invited Speaker at the Norsk Astronomisk Selskap, Tromso, Norway
- Feb. 2012* Invited Plenary Speaker at the London Astrofest.
- 2009 -* Organiser of the Open Evenings at the Bayfordbury Observatory.
- Apr. 2009* Organiser of the Public Lectures for the YENAM 2009 International Conference.
- 2005 -* Regular speaker at the Open Nights at the Bayfordbury Observatory.
- 1998 -* Various talks at various clubs and societies. Lions Club, Mantova (Dec. 1998, Mar. 2011), Hertfordshire Amateurs Astronomy Group, Hatfield (Mar. 2007, Feb 2012), Highfield School, St Albans (Jan. 2008), Women Institute, Essendon (Mar. 2009), D'Overbroecks School, Oxford (Jul. 2009), Telescope Evening, Oxford (Dec. 2011, Jan 2012), Lycée Julie-Victoire Daubié, Argentueil (Mar. 2010, Dec. 2011), Floating Cinema London (Sep. 2015).

• Approved Observing Proposals as Principal Investigator

- ESO 296.B-5054* 107h at VLT (MUSE, DDT program). Fornax 3D: A magnitude-limited survey of galaxies within the virial radius of the Fornax Cluster
- ESO 60.A-9301* 2h at VLT (MUSE Science Verification). *NGC 7742, A ring to rule them all*
- ESO 60.A-9312* 2h at VLT (MUSE Science Verification). *A critical test of the universality of the planetary nebulae luminosity function*
- ESO 082.B-0689* 2h at VLT. *Investigating the link between black-holes and Bulges focussing on the bulge properties*
- CAHA F08 3.5-030* 3n at the 3.5 Calar Alto Telescope. *Constraining the sources of ionisation in early-type galaxies*
- ESO 082.B-0689* 4h at VLT. *Investigating the link between black-holes and Bulges focussing on the bulge properties*
- ESO 081.B-0127 & 079.B-0227* 7h+9h at VLT. *Using nuclear stellar disks to constrain the assembling history of early-type galaxies*
- ESO 076.B-0885* 17h at VLT. *Stars versus gas: a direct comparison of black hole masses measurement techniques*
- G/2004B/071* 28h at Gemini-N. *measuring black-hole masses with NIRI-altair*
- ESO 074.B-0513* 34h at VLT. *measuring black-hole masses using NAOS-Conica*

• Publications

122 refereed publications, of which 12 as 1st author, 11 and 2nd author, 11 as 3rd. As of October 2017 the total number of citations is 11292, of which 1012 for the papers I have led. My Hirsch factor is 58. The 7 papers led by N. Pastorello, K. Oh, H. Ledo, A. Beifiori, L. Mazzuca, M. Collobert and L. Coccato where I am 2nd author, correspond to key chapters of their Ph.D. or MSc thesis carried out under my supervision (or a summer project in the case of N. Pastorello).

– Refereed Papers

- 1) Davis T. A., Bureau M., Onishi K., et al., *WISDOM Project - III: Molecular gas measurement of the supermassive black hole mass in the barred lenticular galaxy NGC4429*, 2017, MNRAS in press (arXiv:1710.01488).
- 2) Pagotto I., Corsini E. M., Dalla Bontà E., et al., *Stringent limits on the masses of the supermassive black holes in seven nearby galaxies*, 2017, AN, in press (arXiv:1707.06120)
- 3) Viaene S., **Sarzi M.**, Baes M., Fritz J., Puerari I., *MUSE stares into the shadows: the high-resolution dust attenuation curve of NGC 5626*, 2017, MNRAS, 472, 1286-1299.
- 4) Davis T. A., Bureau M., Onishi K., Cappellari M., Iguchi S., **Sarzi M.**, *WISDOM Project - II. Molecular gas measurement of the supermassive black hole mass in NGC 4697*, 2017, MNRAS, 468, 4675-4690.
- 5) Onishi K., Iguchi S., Davis T. A., Bureau M., Cappellari M., **Sarzi M.**, Blitz L., *WISDOM project - I. Black hole mass measurement using molecular gas kinematics in NGC 3665*, 2017, MNRAS, 468, 4663-4674.
- 6) Thater S., Krajnović D., Bourne M. A., et al., *A low upper mass limit for the central black hole in the late-type galaxy NGC 4414*, 2017, A&A, 597, A18.
- 7) Johansson J., Woods T. E., Gilfanov M., **Sarzi M.**, Chen Y.-M., Oh K., *Diffuse gas in retired galaxies: nebular emission templates and constraints on the sources of ionization*, 2016, MNRAS, 461, 4505-4516.
- 8) Nyland K., Young L. M., Wrobel J. M., et al., *The ATLAS^{3D} Project - XXXI. Nuclear radio emission in nearby early-type galaxies*, 2016, MNRAS, 458, 2221-2268.
- 9) **Sarzi M.**, Ledo H. R., Coccato L., et al., *Nuclear discs as clocks for the assembly history of early-type galaxies: the case of NGC 4458*, 2016, MNRAS, 457, 1804-1812
- 10) **Sarzi M.**, Kaviraj S., Nedelchev B., Tiffany J., Shabala S. S., Deller A. T., Middleberg E., *Cold-gas outflows in typical low-redshift galaxies are driven by star formation, not AGN*, 2016, MNRAS, 456, L25-L29.
- 11) **Sarzi M.**, Ledo H. R., Dotti M., *On the fragility of nuclear stellar discs against galaxy mergers: surviving photometric and kinematic signatures of nuclear discs*, 2015, MNRAS, 453, 1070-1078.
- 12) McDermid R. M., Alatalo K., Blitz L., et al., *The ATLAS^{3D} Project - XXX. Star formation histories and stellar population scaling relations of early-type galaxies*, 2015, MNRAS, 448, 3484-3513.
- 13) Utomo D., Blitz L., Davis T., Rosolowsky E., Bureau M., Cappellari M., **Sarzi M.**, *Giant Molecular Clouds in the Early-type Galaxy NGC 4526*, 2015, ApJ, 803, 16.
- 14) Duc P.-A., Cuillandre J.-C., Karabal E., et al., *The ATLAS^{3D} project - XXIX. The new look of early-type galaxies and surrounding fields disclosed by extremely deep optical images*, 2015, MNRAS, 446, 120-143.
- 15) Emsellem E., Krajnović D., **Sarzi M.**, *A kinematically distinct core and minor-axis rotation: the MUSE perspective on M87*, 2014, MNRAS, 445, L79-L83.
- 16) Davis T. A., Young L. M., Crocker A. F., et al., *The ATLAS^{3D} Project - XXVIII. Dynamically driven star formation suppression in early-type galaxies*, 2014, MNRAS, 444, 3427-3445.

- 17) Young L. M., Scott N., Serra P., et al., *The ATLAS^{3D} project - XXVII. Cold gas and the colours and ages of early-type galaxies*, 2014, MNRAS, 444, 3408-3426.
- 18) Serra P., Oser L., Krajnović D., et al., *The ATLAS^{3D} project - XXVI. H I discs in real and simulated fast and slow rotators*, 2014, MNRAS, 444, 3388-3407.
- 19) Naab T., Oser L., Emsellem E., et al., *The ATLAS^{3D} project - XXV. Two-dimensional kinematic analysis of simulated galaxies and the cosmological origin of fast and slow rotators*, 2014, MNRAS, 444, 3357-3387.
- 20) Weijmans A.-M., de Zeeuw P. T., Emsellem E., et al., *The ATLAS^{3D} project - XXIV. The intrinsic shape distribution of early-type galaxies*, 2014, MNRAS, 444, 3340-3356.
- 21) Baes M., Allaert F., **Sarzi M.**, et al., *An extremely low gas-to-dust ratio in the dust-lane lenticular galaxy NGC 5485*, 2014, MNRAS, 444, L90-L94.
- 22) McDermid R. M., Cappellari M., Alatalo K., et al., *Connection between Dynamically Derived Initial Mass Function Normalization and Stellar Population Parameters*, 2014, ApJ, 792, L37
- 23) Johansson, J., Woods, T., Gilfanov, M., **Sarzi, M.**, Chen, Y.-M., Oh, K., *Diffuse Gas in Galaxies Sheds New Light on the Origin of Type Ia Supernovae*, 2014, MNRAS, 442, 1079-1089
- 24) Schawinski K., et al., *The Green Valley is a Red Herring: Galaxy Zoo reveals two evolutionary pathways towards quenching of star formation in early- and late-type galaxies*, 2014, MNRAS, 440, 889-907
- 25) Alatalo K., Nyland K., Graves G., et al., *NGC1266 as a Local Candidate for Rapid Cessation of Star Formation*, 2014, ApJ, 780, 186.
- 26) Jeong H., Yi S. K., Kyeong J., **Sarzi M.**, Sung E.-C., Oh K., *On the Nature of Sodium Excess Objects. I. Data and Observed Trends*, 2013, ApJS, 208, 7.
- 27) Krajnović D., Karick A. M., Davies R. L., et al., *The ATLAS^{3D} Project - XXIII. Angular momentum and nuclear surface brightness profiles*, 2013, MNRAS, 433, 2812-2839.
- 28) Martig M., Crocker A. F., Bournaud F., et al., *The ATLAS^{3D} project - XXII. Low-efficiency star formation in early-type galaxies: hydrodynamic models and observations*, 2013, MNRAS, 432, 1914-1927.
- 29) Scott N., Cappellari M., Davies R. L., et al., *The ATLAS^{3D} project - XXI. Correlations between gradients of local escape velocity and stellar populations in early-type galaxies*, 2013, MNRAS, 432, 1894-1913.
- 30) Cappellari M., McDermid R. M., Alatalo K., et al., *The ATLAS^{3D} project - XX. Mass-size and mass- σ distributions of early-type galaxies: bulge fraction drives kinematics, mass-to-light ratio, molecular gas fraction and stellar initial mass function*, 2013, MNRAS, 432, 1862-1893.
- 31) **Sarzi M.**, Alatalo K., Blitz L., et al., *The ATLAS^{3D} project - XIX. The hot gas content of early-type galaxies: fast versus slow rotators*, 2013, MNRAS, 432, 1845-1861.
- 32) Alatalo K., Davis T. A., Bureau M., et al., *The ATLAS^{3D} project - XVIII. CARMA CO imaging survey of early-type galaxies*, 2013, MNRAS, 432, 1796-1844.
- 33) Krajnović D., Alatalo K., Blitz L., et al., *The ATLAS^{3D} project - XVII. Linking photometric and kinematic signatures of stellar discs in early-type galaxies*, 2013, MNRAS, 432, 1768-1795.
- 34) Bayet E., Bureau M., Davis T. A., et al., *The ATLAS^{3D} project - XVI. Physical parameters and spectral line energy distributions of the molecular gas in gas-rich early-type galaxies*, 2013, MNRAS, 432, 1742-1767.
- 35) Cappellari M., Scott N., Alatalo K., et al., *The ATLAS^{3D} project - XV. Benchmark for early-type galaxies scaling relations from 260 dynamical models: mass-to-light ratio, dark matter, Fundamental Plane and Mass Plane*, 2013, MNRAS, 432, 1709-1741.
- 36) Walsh J. L., Barth A. J., Ho L. C., **Sarzi M.**, *The M87 Black Hole Mass from Gas-dynamical Models of Space Telescope Imaging Spectrograph Observations*, 2013, ApJ, 770, 86.

- 37) Pastorello N., **Sarzi M.**, Cappellari M., Emsellem E., Mamon G. A., Bacon R., Davies R. L., de Zeeuw P. T., *The planetary nebulae population in the nuclear regions of M31: the SAURON view*, 2013, MNRAS, 430, 1219-1229.
- 38) Davis T. A., Bureau M., Cappellari M., **Sarzi M.**, Blitz L., *A black-hole mass measurement from molecular gas kinematics in NGC4526*, 2013, Nature, 494, 328-330.
- 39) Davis T. A., Alatalo K., Bureau M., et al., *The ATLAS^{3D} Project - XIV. The extent and kinematics of the molecular gas in early-type galaxies*, 2012, MNRAS, 429, 534
- 40) Serra P., Koribalski B., Duc P.-A., et al., *Discovery of a giant H I tail in the galaxy group HCG 44*, 2013, MNRAS, 428, 370-380.
- 41) Davis T. A., Krajnović D., McDermid R. M., et al., *Gemini GMOS and WHT SAURON integral-field spectrograph observations of the AGN-driven outflow in NGC 1266*, 2012, MNRAS, 426, 1574-1590.
- 42) Lablanche P.-Y., Cappellari M., Emsellem E., et al., *The ATLAS 3D project - XII. Recovery of the mass-to-light ratio of simulated early-type barred galaxies with axisymmetric dynamical models*, 2012, MNRAS, 424, 1495-1521.
- 43) Walsh J. L., van den Bosch R. C. E., Barth A. J., **Sarzi M.**, *A Stellar Dynamical Mass Measurement of the Black Hole in NGC 3998 from Keck Adaptive Optics Observations*, 2012, ApJ, 753, 79.
- 44) Jeong H., Yi S. K., Bureau M., et al., *The SAURON project - XXI. The spatially resolved UV-line strength relations of early-type galaxies*, 2012, MNRAS, 423, 1921-1939.
- 45) Shabala S. S., Ting Y.-S., Kaviraj S., et al., *Galaxy Zoo: dust lane early-type galaxies are tracers of recent, gas-rich minor mergers*, 2012, MNRAS, 423, 59-67.
- 46) Serra P., Oosterloo T., Morganti R., et al., *The ATLAS^{3D} project - XIII. Mass and morphology of H I in early-type galaxies as a function of environment*, 2012, MNRAS, 422, 1835-1862.
- 47) Cappellari M., McDermid R. M., Alatalo K., et al., *Systematic variation of the stellar initial mass function in early-type galaxies*, 2012, Natur, 484, 485-488.
- 48) Crocker A., Krips M., Bureau M., et al., *The ATLAS^{3D} project - XI. Dense molecular gas properties of CO-luminous early-type galaxies*, 2012, MNRAS, 421, 1298-1314.
- 49) Peletier R. F., Kutdemir E., van der Wolk G., et al., *The SAURON project - XX. The Spitzer [3.6] - [4.5] colour in early-type galaxies: colours, colour gradients and inverted scaling relations*, 2011, MNRAS, 1811.
- 50) Falcón-Barroso J., van de Ven G., Peletier R. F., et al., *The SAURON project - XIX. Optical and near-infrared scaling relations of nearby elliptical, lenticular and Sa galaxies*, 2011, MNRAS, 417, 1787-1816.
- 51) Davis T. A., Alatalo K., **Sarzi M.**, et al., *The ATLAS^{3D} project - X. On the origin of the molecular and ionized gas in early-type galaxies*, 2011, MNRAS, 417, 882-899.
- 52) Duc P.-A., Cuillandre J.-C., Serra P., et al., *The ATLAS^{3D} project - IX. The merger origin of a fast- and a slow-rotating early-type galaxy revealed with deep optical imaging: first results*, 2011, MNRAS, 417, 863-881.
- 53) Khochfar S., Emsellem E., Serra P., et al., *The ATLAS^{3D} project - VIII. Modelling the formation and evolution of fast and slow rotator early-type galaxies within Λ CDM*, 2011, MNRAS, 417, 845-862.
- 54) Cappellari M., Emsellem E., Krajnović D., et al., *The ATLAS^{3D} project - VII. A new look at the morphology of nearby galaxies: the kinematic morphology-density relation*, 2011, MNRAS, 416, 1680-1696.
- 55) Bois M., Emsellem E., Bournaud F., et al., *The ATLAS^{3D} project - VI. Simulations of binary galaxy mergers and the link with fast rotators, slow rotators and kinematically distinct cores*, 2011, MNRAS, 416, 1654-1679.
- 56) **Sarzi M.**, Mamon G. A., Cappellari M., Emsellem E., Bacon R., Davies R. L., de Zeeuw P. T., *The planetary nebulae population in the central regions of M32: the SAURON view*, 2011, MNRAS, 415, 2832-2843.

- 57) Oh K., **Sarzi M.**, Schawinski K., Yi S. K., *Improved and Quality-assessed Emission and Absorption Line Measurements in Sloan Digital Sky Survey Galaxies*, 2011, ApJS, 195, 13.
- 58) Krajnović D., Emsellem E., Cappellari M., et al., *The ATLAS^{3D} project - II. Morphologies, kinematic features and alignment between photometric and kinematic axes of early-type galaxies*, 2011, MNRAS, 414, 2923-2949.
- 59) Bureau M., Jeong H., Yi S. K., et al., *The SAURON project - XVIII. The integrated UV-line-strength relations of early-type galaxies*, 2011, MNRAS, 414, 1887-1902.
- 60) Alatalo K., Blitz L., Young L. M., et al., *Discovery of an Active Galactic Nucleus Driven Molecular Outflow in the Local Early-type Galaxy NGC 1266*, 2011, ApJ, 735, 88.
- 61) Davis T. A., Bureau M., Young L. M., et al., *The ATLAS^{3D} project - V. The CO Tully-Fisher relation of early-type galaxies*, 2011, MNRAS, 414, 968-984.
- 62) Young L. M., Bureau M., Davis T. A., et al., *The ATLAS^{3D} project - IV. The molecular gas content of early-type galaxies*, 2011, MNRAS, 414, 940-967.
- 63) Emsellem E., Cappellari M., Krajnović D., et al., *The ATLAS^{3D} project - III. A census of the stellar angular momentum within the effective radius of early-type galaxies: unveiling the distribution of fast and slow rotators*, 2011, MNRAS, 414, 888-912.
- 64) Cappellari M., Emsellem E., Krajnović D., et al., *The ATLAS^{3D} project - I. A volume-limited sample of 260 nearby early-type galaxies: science goals and selection criteria*, 2011, MNRAS, 413, 813-836.
- 65) Oosterloo T., Morganti R., Crocker A., et al., *Early-type galaxies in different environments: an HI view*, 2010, MNRAS, 409, 500-514.
- 66) Kuntschner H., Emsellem E., Bacon R., et al., *The SAURON project - XVII. Stellar population analysis of the absorption line strength maps of 48 early-type galaxies*, 2010, MNRAS, 408, 97-132.
- 67) Ledo H. R., **Sarzi M.**, Dotti M., Khochfar S., Morelli L., *A census of nuclear stellar discs in early-type galaxies*, 2010, MNRAS, 407, 969-985.
- 68) Walsh J. L., Barth A. J., **Sarzi M.**, *The Supermassive Black Hole in M84 Revisited*, 2010, ApJ, 721, 762-776.
- 69) Bois M., Bournaud F., Emsellem E., et al., *Formation of slowly rotating early-type galaxies via major mergers: a resolution study*, 2010, MNRAS, 406, 2405-2420.
- 70) Morelli L., Cesetti M., Corsini E. M., Pizzella A., Dalla Bontà E., **Sarzi M.**, Bertola F., *Multiband photometric decomposition of nuclear stellar disks*, 2010, A&A, 518, A32.
- 71) Thomas D., Maraston C., Schawinski K., **Sarzi M.**, Silk J., *Environment and self-regulation in galaxy formation*, 2010, MNRAS, 404, 1775-1789.
- 72) **Sarzi M.**, Shields J. C., Schawinski K., et al., *The SAURON project - XVI. On the sources of ionization for the gas in elliptical and lenticular galaxies*, 2010, MNRAS, 402, 2187-2210.
- 73) Shapiro K. L., Falcón-Barroso J., van de Ven G., et al., *The SAURON project - XV. Modes of star formation in early-type galaxies and the evolution of the red sequence*, 2010, MNRAS, 402, 2140-2186.
- 74) Schawinski K., Urry C. M., Virani S., et al., *Galaxy Zoo: The Fundamentally Different Co-Evolution of Supermassive Black Holes and Their Early- and Late-Type Host Galaxies*, 2010, ApJ, 711, 284-302.
- 75) Darg D. W., Kaviraj S., Lintott C. J., et al., *Galaxy Zoo: the properties of merging galaxies in the nearby Universe - local environments, colours, masses, star formation rates and AGN activity*, 2010, MNRAS, 401, 1552-1563.
- 76) Darg D. W., Kaviraj S., Lintott C. J., et al., *Galaxy Zoo: the fraction of merging galaxies in the SDSS and their morphologies*, 2010, MNRAS, 401, 1043-1056.

- 77) Rogers B., Ferreras I., Kaviraj S., Pasquali A., **Sarzi M.**, *Star formation and nuclear activity in close pairs of early-type galaxies*, 2009, MNRAS, 399, 2172-2182.
- 78) Cardamone C., Schawinski K., **Sarzi M.**, et al., *Galaxy Zoo Green Peas: discovery of a class of compact extremely star-forming galaxies*, 2009, MNRAS, 399, 1191-1205.
- 79) Jeong H., Yi S. K., Bureau M., et al., *The SAURON project - XIII. SAURON-GALEX study of early-type galaxies: the ultraviolet colour-magnitude relations and Fundamental Planes*, 2009, MNRAS, 398, 2028-2048.
- 80) Scott N., Cappellari M., Davies R. L., et al., *The SAURON Project - XIV. No escape from V_{esc} : a global and local parameter in early-type galaxy evolution*, 2009, MNRAS, 398, 1835-1857.
- 81) Schawinski K., Lintott C., Thomas D., et al., *Galaxy Zoo: a sample of blue early-type galaxies at low redshift*, 2009, MNRAS, 396, 818-829.
- 82) Beifiori A., **Sarzi M.**, Corsini E. M., Dalla Bontà E., Pizzella A., Coccato L., Bertola F., *Upper Limits on the Masses of 105 Supermassive Black Holes from Hubble Space Telescope/Space Telescope Imaging Spectrograph Archival Data*, 2009, ApJ, 692, 856-868.
- 83) Schawinski K., Lintott C. J., Thomas D., et al., *Destruction of Molecular Gas Reservoirs in Early-Type Galaxies by Active Galactic Nucleus Feedback*, 2009, ApJ, 690, 1672-1680.
- 84) Dalla Bontà E., Ferrarese L., Corsini E. M., Miralda-Escudé J., Coccato L., **Sarzi M.**, Pizzella A., Beifiori A., *The High-Mass End of the Black Hole Mass Function: Mass Estimates in Brightest Cluster Galaxies*, 2009, ApJ, 690, 537-559.
- 85) Krajnović D., Bacon R., Cappellari M., et al., *The SAURON project - XII. Kinematic substructures in early-type galaxies: evidence for discs in fast rotators*, 2008, MNRAS, 390, 93-117.
- 86) Walsh J. L., Barth A. J., Ho L. C., Filippenko A. V., Rix H.-W., Shields J. C., **Sarzi M.**, Sargent W. L. W., *Hubble Space Telescope Spectroscopic Observations of the Narrow-Line Region in Nearby Low-Luminosity Active Galactic Nuclei*, 2008, AJ, 136, 1677-1702.
- 87) Morelli L., Pompei E., Pizzella A., et al., *Stellar populations of bulges in 14 cluster disc galaxies*, 2008, MNRAS, 389, 341-363.
- 88) Pizzella A., Corsini E. M., **Sarzi M.**, Magorrian J., Méndez-Abreu J., Coccato L., Morelli L., Bertola F., *Structure and dynamics of galaxies with a low surface-brightness disc - I. The stellar and ionized-gas kinematics*, 2008, MNRAS, 387, 1099-1116.
- 89) Schawinski K., Thomas D., **Sarzi M.**, Maraston C., Kaviraj S., Joo S.-J., Yi S. K., Silk J., *Observational evidence for AGN feedback in early-type galaxies*, 2007, MNRAS, 382, 1415-1431.
- 90) Kaviraj S., Kirkby L. A., Silk J., **Sarzi M.**, *The UV properties of E+A galaxies: constraints on feedback-driven quenching of star formation*, 2007, MNRAS, 382, 960-970.
- 91) **Sarzi M.**, Allard E. L., Knapen J. H., Mazzuca L. M., *Star formation and stellar populations across nuclear rings in galaxies*, 2007, MNRAS, 380, 949-962.
- 92) Ganda K., Peletier R. F., McDermid R. M., et al., *Absorption-line strengths of 18 late-type spiral galaxies observed with SAURON*, 2007, MNRAS, 380, 506-540.
- 93) Peletier R. F., Falcón-Barroso J., Bacon R., et al., *The SAURON project - XI. Stellar populations from absorption-line strength maps of 24 early-type spirals*, 2007, MNRAS, 379, 445-468.
- 94) Cappellari M., Emsellem E., Bacon R., et al., *The SAURON project - X. The orbital anisotropy of elliptical and lenticular galaxies: revisiting the $(V/\sigma, \epsilon)$ diagram with integral-field stellar kinematics*, 2007, MNRAS, 379, 418-444.

- 95) Emsellem E., Cappellari M., Krajnović D., et al., *The SAURON project - IX. A kinematic classification for early-type galaxies*, 2007, MNRAS, 379, 401-417.
- 96) Shields J. C., Rix H.-W., **Sarzi M.**, et al., *The Survey of Nearby Nuclei with the Space Telescope Imaging Spectrograph: Emission-Line Nuclei at Hubble Space Telescope Resolution*, 2007, ApJ, 654, 125-137.
- 97) McDermid R. M., Emsellem E., Shapiro K. L., et al., *The SAURON project - VIII. OASIS/CFHT integral-field spectroscopy of elliptical and lenticular galaxy centres*, 2006, MNRAS, 373, 906-958.
- 98) Mazuca L. M., **Sarzi M.**, Knapen J. H., Veilleux S., Swaters R., *Minor Merger Origin for the Circumnuclear Starburst in NGC 7742*, 2006, ApJ, 649, L79-L82.
- 99) Allard E. L., Knapen J. H., Peletier R. F., **Sarzi M.**, *The star formation history and evolution of the circumnuclear region of M100*, 2006, MNRAS, 371, 1087-1105.
- 100) Morganti R., de Zeeuw P. T., Oosterloo T. A., et al., *Neutral hydrogen in nearby elliptical and lenticular galaxies: the continuing formation of early-type galaxies*, 2006, MNRAS, 371, 157-169.
- 101) Collobert M., **Sarzi M.**, Davies R. L., Kuntschner H., Colless M., *Central stellar populations of early-type galaxies in low-density environments*, 2006, MNRAS, 370, 1213-1222.
- 102) Falcón-Barroso J., Bacon R., Bureau M., et al., *The SAURON project - VII. Integral-field absorption and emission-line kinematics of 24 spiral galaxy bulges*, 2006, MNRAS, 369, 529-566.
- 103) Kuntschner H., Emsellem E., Bacon R., et al., *The SAURON project - VI. Line strength maps of 48 elliptical and lenticular galaxies*, 2006, MNRAS, 369, 497-528.
- 104) Houghton R. C. W., Magorrian J., **Sarzi M.**, Thatte N., Davies R. L., Krajnović D., *The central kinematics of NGC 1399 measured with 14 pc resolution*, 2006, MNRAS, 367, 2-18.
- 105) **Sarzi M.**, Falcón-Barroso J., Davies R. L., et al., *The SAURON project - V. Integral-field emission-line kinematics of 48 elliptical and lenticular galaxies*, 2006, MNRAS, 366, 1151-1200.
- 106) Cappellari M., Bacon R., Bureau M., et al., *The SAURON project - IV. The mass-to-light ratio, the virial mass estimator and the Fundamental Plane of elliptical and lenticular galaxies*, 2006, MNRAS, 366, 1126-1150.
- 107) Coccato L., **Sarzi M.**, Pizzella A., Corsini E. M., Dalla Bontà E., Bertola F., *NGC 4435: a bulge-dominated galaxy with an unforeseen low-mass central black hole*, 2006, MNRAS, 366, 1050-1066.
- 108) Pizzella A., Corsini E. M., Dalla Bontà E., **Sarzi M.**, Coccato L., Bertola F., *On the Relation between Circular Velocity and Central Velocity Dispersion in High and Low Surface Brightness Galaxies*, 2005, ApJ, 631, 785-791.
- 109) **Sarzi M.**, Rix H.-W., Shields J. C., Ho L. C., Barth A. J., Rudnick G., Filippenko A. V., Sargent W. L. W., *The Stellar Populations in the Central Parsecs of Galactic Bulges*, 2005, ApJ, 628, 169-186.
- 110) Walcher C. J., van der Marel R. P., McLaughlin D., et al., *Masses of Star Clusters in the Nuclei of Bulgeless Spiral Galaxies*, 2005, ApJ, 618, 237-246.
- 111) Böker T., **Sarzi M.**, McLaughlin D. E., van der Marel R. P., Rix H.-W., Ho L. C., Shields J. C., *A Hubble Space Telescope Census of Nuclear Star Clusters in Late-Type Spiral Galaxies. II. Cluster Sizes and Structural Parameter Correlations*, 2004, AJ, 127, 105-118.
- 112) Pizzella A., Corsini E. M., Morelli L., **Sarzi M.**, Scarlata C., Stiavelli M., Bertola F., *Nuclear Stellar Disks in Spiral Galaxies*, 2002, ApJ, 573, 131-137.
- 113) **Sarzi M.**, Rix H.-W., Shields J. C., et al., *Limits on the Mass of the Central Black Hole in 16 Nearby Bulges*, 2002, ApJ, 567, 237-246.

- 114) Böker T., Laine S., van der Marel R. P., **Sarzi M.**, Rix H.-W., Ho L. C., Shields J. C., *A Hubble Space Telescope Census of Nuclear Star Clusters in Late-Type Spiral Galaxies. I. Observations and Image Analysis*, 2002, *AJ*, 123, 1389-1410.
- 115) Ho L. C., **Sarzi M.**, Rix H.-W., Shields J. C., Rudnick G., Filippenko A. V., Barth A. J., *An Efficient Strategy to Select Targets for Gasdynamical Measurements of Black Hole Masses Using the Hubble Space Telescope*, 2002, *PASP*, 114, 137-143.
- 116) Barth A. J., **Sarzi M.**, Rix H.-W., Ho L. C., Filippenko A. V., Sargent W. L. W., *Evidence for a Supermassive Black Hole in the S0 Galaxy NGC 3245*, 2001, *ApJ*, 555, 685-708.
- 117) **Sarzi M.**, Rix H.-W., Shields J. C., Rudnick G., Ho L. C., McIntosh D. H., Filippenko A. V., Sargent W. L. W., *Supermassive Black Holes in Bulges*, 2001, *ApJ*, 550, 65-74.
- 118) **Sarzi M.**, Corsini E. M., Pizzella A., Vega Beltrán J. C., Cappellari M., Funes J. G., Bertola F., *NGC 4672: A new case of an early-type disk galaxy with an orthogonally decoupled core*, 2000, *A&A*, 360, 439-446.
- 119) Shields J. C., Rix H.-W., McIntosh D. H., Ho L. C., Rudnick G., Filippenko A. V., Sargent W. L. W., **Sarzi M.**, *Evidence for a Black Hole and Accretion Disk in the LINER NGC 4203*, 2000, *ApJ*, 534, L27-L30.
- 120) Cinzano P., Rix H.-W., **Sarzi M.**, Corsini E. M., Zeilinger W. W., Bertola F., *The kinematics and the origin of the ionized gas in NGC 4036*, 1999, *MNRAS*, 307, 433-448.
- 121) Bertola F., Corsini E. M., Vega Beltrán J. C., Pizzella A., Sarzi M., Cappellari M., Funes J. G., *The Bulge-Disk Orthogonal Decoupling in Galaxies: NGC 4698*, 1999, *ApJ*, 519, L127-L130.
- 122) Corsini E. M., Pizzella A., **Sarzi M.**, et al., *Dark matter in early-type spiral galaxies: the case of NGC 2179 and of NGC 2775*, 1999, *A&A*, 342, 671-686.

– Most Notable Conference Proceedings

- a) **Sarzi M.**, *The central planetary nebulae populations of external galaxies with SAURON*, IAU Symposium 283: Planetary Nebulae, an Eye to the Future, eds A. Manchado, L. Stanghellini and D. A. Schonberner, 2012. 283
- b) **Sarzi M.**, and the SAURON team, *Recent Star Formation in Nearby Early-type Galaxies*, 2007 ASP Conf. Series: Pathways through an eclectic Universe, eds J. Knapen, T. Mahoney, & A. Vazdekis, 2008, 218
- c) **Sarzi M.**, and the SAURON team, *On the origin and fate of ionised-gas in early-type galaxies: The SAURON perspective*, 2007, *New Astronomy Review*, 51, 18
- d) **Sarzi M.**, Rix, H.-W., Shields, J., Rudnick, G., Ho, L., McIntosh, D., Filippenko, A., Sargent, W., Barth, A., *The Stellar Populations in the Central Parsecs of Bulges*, 2004, IAU Symp. 222: The Interplay among Black Holes, Stars and ISM in Galactic Nuclei, eds. T. Storchi Bergmann, L. Ho & H. Schmitt, Cambridge University Press, Cambridge, 2004, 145.
- e) **Sarzi M.**, *Supermassive Black Holes in Bulges*, 2003, Carnegie Observatories Astrophysics Series, Vol. 1: Coevolution of Black Holes and Galaxies, ed. L. Ho, Cambridge University Press, Cambridge, 2004.

– Other Notable Publications

- i) **Sarzi M.**, *How black holes restrain old galaxies*, 2016, *Nature*, 533, 473

• Academic References

– Prof. Roger Davies - Head of Department

Department of Physics, Oxford University Keble Road, OX1 3RH, Oxford, UK Tel: +44 1865 273305,
Fax: +44 1865 273390, E-mail: rld@astro.ox.ac.uk

- Prof. Tim de Zeeuw - Director General of ESO
ESO, Karl-Schwarzschild-Strasse 2 D-85748 Garching bei Munchen, Germany Tel: +49 89 3206777,
Fax: +49 89 3202362 E-mail: tdezeeuw@eso.org
- Prof. Joseph Shields - Head of Department
Department of Physics & Astronomy, Ohio University Clippinger Labs 251B, OH-45701, Athens, Ohio,
USA Tel: +1 740 593 0336, Fax: +1 740 593 0433, E-mail: shields@phy.ohiou.edu