

Publication List

Garreth Martin

79 peer-reviewed publications and preprints • 2,606 citations • h-index 26

First-Author Publications (12)

Intracluster light and dark matter halo shapes reflect common assembly, not mutual coupling: shape correspondence in CDM but not SIDM

G. Martin; N. A. Hatch; W. Cui; A. Fernandez; Y. M. Bahé; M. S. Fischer; M. Montes; F. R. Pearce; et al.
08/2026 | **MNRAS** submitted • [PDF link](#)

Intracluster light as a dark matter tracer: how their spatial and kinematic relationship is shaped by satellite demographics

G. Martin; F. R. Pearce; N. A. Hatch; H. J. Brown; J. Butler; Y. M. Bahé; W. Cui; Y. Dubois; et al.
06/2026 | **MNRAS** 548, stag649 • <https://doi.org/10.1093/mnras/stag649> • 2 citations

Cosmic reflections I: the structural diversity of simulated and observed low-mass galaxy analogues

G. Martin; A. E. Watkins; Y. Dubois; J. Devriendt; S. Kaviraj; D. Kim; K. Kraljic; I. Lazar; et al.
08/2025 | **MNRAS** 541, 1831 • <https://doi.org/10.1093/mnras/staf1092> • 12 citations

Stellar stripping efficiencies of satellites in numerical simulations: the effect of resolution, satellite properties, and numerical disruption

G. Martin; F. R. Pearce; N. A. Hatch; A. Contreras-Santos; A. Knebe; W. Cui
12/2024 | **MNRAS** 535, 2375 • <https://doi.org/10.1093/mnras/stae2488> • 18 citations

Preparing for low surface brightness science with the Vera C. Rubin Observatory: Characterization of tidal features from mock images

G. Martin; A. E. Bazkiaei; M. Spavone; E. Iodice; J. C. Mihos; M. Montes; J. A. Benavides; S. Brough; et al.
06/2022 | **MNRAS** 513, 1459 • <https://doi.org/10.1093/mnras/stac1003> • 107 citations

The role of mergers and interactions in driving the evolution of dwarf galaxies over cosmic time

G. Martin; R. A. Jackson; S. Kaviraj; H. Choi; J. E. G. Devriendt; Y. Dubois; T. Kimm; K. Kraljic; et al.
01/2021 | **MNRAS** 500, 4937 • <https://doi.org/10.1093/mnras/staa3443> • 89 citations

Galaxy morphological classification in deep-wide surveys via unsupervised machine learning

G. Martin; S. Kaviraj; A. Hocking; S. C. Read; J. E. Geach
01/2020 | **MNRAS** 491, 1408 • <https://doi.org/10.1093/mnras/stz3006> • 119 citations

The formation and evolution of low-surface-brightness galaxies

G. Martin; S. Kaviraj; C. Laigle; J. E. G. Devriendt; R. A. Jackson; S. Peirani; Y. Dubois; C. Pichon; et al.
05/2019 | **MNRAS** 485, 796 • <https://doi.org/10.1093/mnras/stz356> • 175 citations

The role of mergers in driving morphological transformation over cosmic time

G. Martin; S. Kaviraj; J. E. G. Devriendt; Y. Dubois; C. Pichon
10/2018 | **MNRAS** 480, 2266 • <https://doi.org/10.1093/mnras/sty1936> • 173 citations

Normal black holes in bulge-less galaxies: the largely quiescent, merger-free growth of black holes over cosmic time

G. Martin; S. Kaviraj; M. Volonteri; B. D. Simmons; J. E. G. Devriendt; C. J. Lintott; R. J. Smethurst; Y. Dubois; et al.
05/2018 | **MNRAS** 476, 2801 • <https://doi.org/10.1093/mnras/sty324> • 84 citations

Identifying the progenitors of present-day early-type galaxies in observational surveys: correcting 'progenitor bias' using the Horizon-AGN simulation

G. Martin; S. Kaviraj; J. E. G. Devriendt; Y. Dubois; C. Pichon; C. Laigle
03/2018 | **MNRAS** 474, 3140 • <https://doi.org/10.1093/mnras/stx3057> • 18 citations

The limited role of galaxy mergers in driving stellar mass growth over cosmic time

G. Martin; S. Kaviraj; J. E. G. Devriendt; Y. Dubois; C. Laigle; C. Pichon
11/2017 | **MNRAS** 472, L50 • <https://doi.org/10.1093/mnras/lsx136> • 60 citations

Books & Edited Volumes (1)

From Dark Matter to Machine Learning: A collection of EAS 2022 proceedings from the S3 and S11 symposia

C. Tortora; M. Brescia; N. R. Napolitano; N. Chamba; I. Lazar; **G. W. Martin**; S. Palomares-Ruiz
2023 | **MemSAIT** Vol. 94, n. 3, Co-Editor • [Table of Contents](#)

All Peer-Reviewed Publications and Preprints

Publications where I had significant involvement in supervision of the primary author are indicated by ★.

2026

Intracluster light and dark matter halo shapes reflect common assembly, not mutual coupling: shape correspondence in CDM but not SIDM

G. Martin; N. A. Hatch; W. Cui; A. Fernandez; Y. M. Bahé; M. S. Fischer; M. Montes; F. R. Pearce; et al.
08/2026 | **MNRAS** submitted • [PDF link](#)

Intracluster light as a dark matter tracer: how their spatial and kinematic relationship is shaped by satellite demographics

G. Martin; F. R. Pearce; N. A. Hatch; H. J. Brown; J. Butler; Y. M. Bahé; W. Cui; Y. Dubois; et al.
06/2026 | **MNRAS** 548, stag649 • <https://doi.org/10.1093/mnras/stag649> • 2 citations

Intracluster light is a close tracer of the dark matter halo shape

A. Fernandez; Y. M. Bahé; N. A. Hatch; J. Butler; T. Kolcu; **G. Martin**; M. Montes
05/2026 | **MNRAS** 548, stag590 • <https://doi.org/10.1093/mnras/stag590> • 1 citations

Downsizing does not extend to dwarf galaxies: identifying the stellar mass regimes shaped by supernova and AGN feedback

I. Lazar; S. Kaviraj; **G. Martin**; C. J. Conselice; S. Koudmani; A. E. Watkins; S. K. Yi; D. Kakkad; et al.
04/2026 | **MNRAS** 547, stag207 • <https://doi.org/10.1093/mnras/stag207>

statmorph-lsst: Quantifying and correcting morphological biases in galaxy surveys

E. Sazonova; C. R. Morgan; M. Balogh; M. Blaña; C. G. Bornancini; A. P. Cotter; D. Donevski; ...; **G. Martin**; et al.
04/2026 | **OJAp** 9, 60562 • <https://doi.org/10.33232/001c.160562> • 5 citations

AGN in massive galaxies identified via optical broad-band variability: lessons from VST-COSMOS for future LSST science ★

B. Bichang'a; D. De Cicco; S. Kaviraj; I. Lazar; A. E. Watkins; **G. Martin**; D. Kakkad
04/2026 | **MNRAS** 547, stag287 • <https://doi.org/10.1093/mnras/stag287>

The major merger—active galactic nucleus connection up to cosmic noon

A. La Marca; B. Margalef-Bentabol; L. Wang; S. C. Trager; V. Rodriguez-Gomez; **G. Martin**
04/2026 | **A&A** 708, A373 • <https://doi.org/10.1051/0004-6361/202555185>

Multiwavelength morphology and dust emission in low-redshift dwarf galaxies in COSMOS-Web with HST and JWST

D. Kakkad; I. Lazar; S. Harish; B. Bichang'a; R. K. Cochrane; S. Kaviraj; A. E. Watkins; **G. Martin**; et al.
04/2026 | **MNRAS** 547, stag267 • <https://doi.org/10.1093/mnras/stag267>

Isophote shape analysis and the unfortunate subtlety of dwarf galaxy structure

A. E. Watkins; I. Lazar; T. Sedgwick; **G. Martin**; S. Kaviraj; D. Kakkad; C. Collins; B. Bichang'a
04/2026 | **MNRAS** 547, stag472 • <https://doi.org/10.1093/mnras/stag472>

LIGHTS. The Thin Encircling Stellar Stream of NGC 3938

D. Zaritsky; J. Nibauer; G. Golini; I. Ruiz Cejudo; I. Trujillo; S. Pearson; N. Chamba; ...; **G. Martin**; et al.
03/2026 | **ApJL** 1000, L6 • <https://doi.org/10.3847/2041-8213/ae45a4>

On the Origin of Intracluster Light Based on the High-resolution Simulation, NEWCLUSTER

S. Jeon; E. Contini; S. Han; J. Rhee; **G. Martin**; J. Kim; J. Lee; T. Kimm; et al.
02/2026 | **ApJ** 998, 30 • <https://doi.org/10.3847/1538-4357/ae2eaa> • 6 citations

Starbursts hiding in the main sequence: a pathway toward quenching?

F. Renaud; K. Kraljic; J. Freundlich; B. Magnelli; M. Béthermin; C. Accard; D. Ismail; ...; **G. Martin**; et al.
02/2026 | **arXiv** arXiv:2602.23445 • <https://doi.org/10.48550/arXiv.2602.23445>

Variability-selected AGN in dwarf galaxies: the incidence of AGN in dwarf and massive galaxies is similar

S. Kaviraj; D. De Cicco; I. Lazar; B. Bichang'a; A. E. Watkins; **G. Martin**; S. Koudmani
01/2026 | **MNRAS** 545, staf1918 • <https://doi.org/10.1093/mnras/staf1918> • 2 citations

Investigating the imprints of tidal features on simulated galaxy outskirts in LSST-like mock observations ★

A. Khalid; S. Brough; **G. Martin**; L. C. Kimmig; R. Remus; C. D. P. Lagos; L. Canepa; A. Desmons
01/2026 | **MNRAS** 545, staf1989 • <https://doi.org/10.1093/mnras/staf1989> • 1 citations

2025

The dwarf stellar mass function in different environments and the lack of a generic missing dwarfs problem in Λ CDM

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I. Lazar; S. Kaviraj; **G. Martin**; A. Watkins; D. Kakkad; B. Bichang'a; K. Kraljic; S. K. Yi; et al.
12/2025 | *MNRAS* 544, 3936 • <https://doi.org/10.1093/mnras/staf1870>

Unlocking the physics of dwarf galaxies in the 2040s: The case for a next-generation wide-field spectroscopic facility with fibres and IFUs

C. Tortora; D. Carollo; L. Hunt; F. Marleau; R. Ragusa; T. Saifollahi; F. Buitrago; ...; **G. Martin**; et al.
12/2025 | *arXiv* arXiv:2512.18260 • <https://doi.org/10.48550/arXiv.2512.18260>

The origin of the intracluster light in The Three Hundred simulations

A. Contreras-Santos; A. Knebe; W. Cui; I. Alonso Asensio; C. Dalla Vecchia; R. Haggar; R. A. Mostoghiu Paun; ...; **G. Martin**; et al.

11/2025 | *A&A* 703, A85 • <https://doi.org/10.1051/0004-6361/202554248> • 2 citations

Tidal features around simulated groups and cluster galaxies: enhancement and suppression of merger events through environment in LSST-like mock observations ★

A. Khalid; S. Brough; **G. Martin**; L. C. Kimmig; R. Remus; C. D. P. Lagos; L. M. Valenzuela; R. J. Wright
11/2025 | *MNRAS* 543, 3391 • <https://doi.org/10.1093/mnras/staf1635> • 3 citations

Intra-cluster light as a dynamical clock for galaxy clusters: Insights from the MAGNETICUM, IllustrisTNG, Hydrangea, and Horizon-AGN simulations

L. C. Kimmig; S. Brough; K. Dolag; R. Remus; Y. M. Bahé; **G. Martin**; A. Pillepich; N. Hatch; et al.
08/2025 | *A&A* 700, A95 • <https://doi.org/10.1051/0004-6361/202554777> • 22 citations

LIGHTS: A robust technique to identify galaxy edges

G. Golini; I. Trujillo; D. Zaritsky; M. Montes; R. Infante-Sainz; **G. Martin**; N. Chamba; I. Ruiz Cejudo; et al.
08/2025 | *A&A* 700, A91 • <https://doi.org/10.1051/0004-6361/202555288> • 8 citations

Cosmic reflections I: the structural diversity of simulated and observed low-mass galaxy analogues

G. Martin; A. E. Watkins; Y. Dubois; J. Devriendt; S. Kaviraj; D. Kim; K. Kraljic; I. Lazar; et al.
08/2025 | *MNRAS* 541, 1831 • <https://doi.org/10.1093/mnras/staf1092> • 12 citations

Nearby dwarf galaxies with extreme star formation rates: a window into dwarf–galaxy evolution in the early Universe

S. Kaviraj; B. Bichang'a; I. Lazar; A. E. Watkins; **G. Martin**; R. A. Jackson
06/2025 | *MNRAS* 540, 594 • <https://doi.org/10.1093/mnras/staf716> • 2 citations

The diversity of rotation curves of galaxies in the NEWHORIZON cosmological simulation

R. A. Jackson; J. F. Navarro; I. M. E. Santos-Santos; S. Kaviraj; S. K. Yi; S. Peirani; Y. Dubois; **G. Martin**; et al.
06/2025 | *MNRAS* 539, 3797 • <https://doi.org/10.1093/mnras/staf667> • 3 citations

LIGHTS. The extended point spread functions of the LIGHTS survey at the LBT

N. Sedighi; Z. Sharbaf; I. Trujillo; S. Eskandarlou; G. Golini; R. Infante-Sainz; S. Raji; ...; **G. Martin**; et al.
06/2025 | *OJAp* 8, 73 • <https://doi.org/10.33232/001c.140865> • 7 citations

Morphological Feature Distances among the Spectral Types of SDSS Galaxies

D. Kim; **G. Martin**
06/2025 | *ApJ* 986, 45 • <https://doi.org/10.3847/1538-4357/add152> • 1 citations

Intracluster light is a biased tracer of the dark matter distribution in clusters ★

J. Butler; **G. Martin**; N. A. Hatch; F. Pearce; S. Brough; Y. Dubois
05/2025 | *MNRAS* 539, 2279 • <https://doi.org/10.1093/mnras/staf615> • 13 citations

UV LIGHTS: New tools for revealing the low surface brightness regime in the ultraviolet

I. Ruiz Cejudo; I. Trujillo; G. Golini; N. Sedighi; M. Montes; S. Guerra Arencibia; M. D'Onofrio; ...; **G. Martin**; et al.
05/2025 | *A&A* 697, A91 • <https://doi.org/10.1051/0004-6361/202452836> • 1 citations

The quenching of star formation in dwarf galaxies: new perspectives from deep-wide surveys

S. Kaviraj; I. Lazar; A. E. Watkins; C. Laigle; **G. Martin**; R. A. Jackson
03/2025 | *MNRAS* 538, 153 • <https://doi.org/10.1093/mnras/staf233> • 21 citations

2D light distributions of dwarf galaxies - key tests of the implementation of physical processes in simulations

A. E. Watkins; **G. Martin**; S. Kaviraj; C. Collins; Y. Dubois; K. Kraljic; C. Pichon; S. K. Yi
03/2025 | *MNRAS* 537, 3499 • <https://doi.org/10.1093/mnras/staf223> • 8 citations

Morphological classification of galaxies through structural and star formation parameters using machine learning

G. Aguilar-Argüello; G. Fuentes-Pineda; H. M. Hernández-Toledo; L. A. Martínez-Vázquez; J. A. Vázquez-Mata; S. Brough; R. Demarco; ...; **G. Martin**; et al.

02/2025 | *MNRAS* 537, 876 • <https://doi.org/10.1093/mnras/staf085> • 12 citations

The Lyman Continuum Escape Fraction of Star-forming Galaxies at $2.4 \leq z \leq 3.0$ from UVCANDELS

X. Wang; H. I. Teplitz; B. M. Smith; R. A. Windhorst; M. Rafelski; V. Mehta; A. Alavi; ...; **G. Martin**; et al.

02/2025 | *ApJ* 980, 74 • <https://doi.org/10.3847/1538-4357/ada4ab> • 38 citations

Black hole spin evolution across cosmic time from the NEWHORIZON simulation

R. S. Beckmann; Y. Dubois; M. Volonteri; C. A. Dong-Paez; S. Peirani; J. M. Piotrowska; **G. Martin**; K. Kraljic; et al.

01/2025 | *MNRAS* 536, 1838 • <https://doi.org/10.1093/mnras/stae2595> • 18 citations

2024

New tools for studying planarity in galaxy satellite systems: Milky Way satellite planes are consistent with Λ CDM ★

E. Uzeirbegovic; **G. Martin**; S. Kaviraj; R. A. Jackson; K. Kraljic; Y. Dubois; C. Pichon; J. Devriendt; et al.

12/2024 | *MNRAS* 535, 3775 • <https://doi.org/10.1093/mnras/stae2632> • 10 citations

Stellar stripping efficiencies of satellites in numerical simulations: the effect of resolution, satellite properties, and numerical disruption

G. Martin; F. R. Pearce; N. A. Hatch; A. Contreras-Santos; A. Knebe; W. Cui

12/2024 | *MNRAS* 535, 2375 • <https://doi.org/10.1093/mnras/stae2488> • 18 citations

UVCANDELS: Catalogs of Photometric Redshifts and Galaxy Physical Properties

V. Mehta; M. Rafelski; B. Sunnquist; H. I. Teplitz; C. Scarlata; X. Wang; A. Fontana; ...; **G. Martin**; et al.

11/2024 | *ApJS* 275, 17 • <https://doi.org/10.3847/1538-4365/ad7d8f> • 9 citations

Dust and power: Unravelling the merger-active galactic nucleus connection in the second half of cosmic history

A. La Marca; B. Margalef-Bentabol; L. Wang; F. Gao; A. D. Goulding; **G. Martin**; V. Rodriguez-Gomez; S. C. Trager; et al.

10/2024 | *A&A* 690, A326 • <https://doi.org/10.1051/0004-6361/202348188> • 24 citations

The structural properties of nearby dwarf galaxies in low-density environments - size, surface brightness, and colour gradients ★

I. Lazar; S. Kaviraj; A. E. Watkins; **G. Martin**; B. Bichang'a; R. A. Jackson

10/2024 | *MNRAS* 533, 3771 • <https://doi.org/10.1093/mnras/stae1956> • 12 citations

Assembly of the intracluster light in the HORIZON-AGN simulation ★

H. J. Brown; **G. Martin**; F. R. Pearce; N. A. Hatch; Y. M. Bahé; Y. Dubois

10/2024 | *MNRAS* 534, 431 • <https://doi.org/10.1093/mnras/stae2084> • 26 citations

The Ultraviolet Luminosity Function at $0.6 < z < 1$ from UVCANDELS

L. Sun; X. Wang; H. I. Teplitz; V. Mehta; A. Alavi; M. Rafelski; R. A. Windhorst; ...; **G. Martin**; et al.

09/2024 | *ApJ* 972, 8 • <https://doi.org/10.3847/1538-4357/ad5540> • 21 citations

RMS asymmetry: a robust metric of galaxy shapes in images with varied depth and resolution

E. Sazonova; C. Morgan; M. Balogh; K. Alatalo; J. A. Benavides; A. Bluck; S. Brough; ...; **G. Martin**; et al.

09/2024 | *OJAp* 7, 77 • <https://doi.org/10.33232/001c.123524> • 19 citations

LIGHTS. Survey Overview and a Search for Low Surface Brightness Satellite Galaxies

D. Zaritsky; G. Golini; R. Donnerstein; I. Trujillo; M. Akhlaghi; N. Chamba; M. D'Onofrio; ...; **G. Martin**; et al.

08/2024 | *AJ* 168, 69 • <https://doi.org/10.3847/1538-3881/ad543f> • 23 citations

The properties of AGN in dwarf galaxies identified via SED fitting ★

B. Bichang'a; S. Kaviraj; I. Lazar; R. A. Jackson; S. Das; D. J. B. Smith; A. E. Watkins; **G. Martin**

07/2024 | *MNRAS* 532, 613 • <https://doi.org/10.1093/mnras/stae1441> • 18 citations

Galaxy merger challenge: A comparison study between machine learning-based detection methods

B. Margalef-Bentabol; L. Wang; A. La Marca; C. Blanco-Prieto; D. Chudy; H. Domínguez-Sánchez; A. D. Goulding; ...; **G. Martin**; et al.

07/2024 | *A&A* 687, A24 • <https://doi.org/10.1051/0004-6361/202348239> • 31 citations

Characterizing tidal features around galaxies in cosmological simulations ★

A. Khalid; S. Brough; **G. Martin**; L. C. Kimmig; C. D. P. Lagos; R. -. Remus; C. Martinez-Lombilla

06/2024 | *MNRAS* 530, 4422 • <https://doi.org/10.1093/mnras/stae1064> • 31 citations

Distribution of Merging and Post-merger Galaxies in Nearby Galaxy Clusters

D. Kim; Y. Sheen; Y. L. Jaffé; K. Kelkar; A. Ranjan; F. Piraino-Cerda; J. P. Crossett; ...; **G. Martin**; et al.
05/2024 | **ApJ** 966, 124 • <https://doi.org/10.3847/1538-4357/ad32ce> • 15 citations

The morphological mix of dwarf galaxies in the nearby Universe ★

I. Lazar; S. Kaviraj; A. E. Watkins; **G. Martin**; B. Bichang'a; R. A. Jackson
03/2024 | **MNRAS** 529, 499 • <https://doi.org/10.1093/mnras/stae510> • 33 citations

Preparing for low surface brightness science with the Vera C. Rubin Observatory: a comparison of observable and simulated intracluster light fractions

S. Brough; S. L. Ahad; Y. M. Bahé; A. Ellien; A. H. Gonzalez; Y. Jiménez-Teja; L. C. Kimmig; **G. Martin**; et al.
02/2024 | **MNRAS** 528, 771 • <https://doi.org/10.1093/mnras/stad3810> • 53 citations

Evidence for non-merger co-evolution of galaxies and their supermassive black holes

R. J. Smethurst; R. S. Beckmann; B. D. Simmons; A. Coil; J. Devriendt; Y. Dubois; I. L. Garland; ...; **G. Martin**; et al.
02/2024 | **MNRAS** 527, 10855 • <https://doi.org/10.1093/mnras/stad1794> • 21 citations

Emergence and cosmic evolution of the Kennicutt-Schmidt relation driven by interstellar turbulence

K. Kraljic; F. Renaud; Y. Dubois; C. Pichon; O. Agertz; E. Andersson; J. Devriendt; ...; **G. Martin**; et al.
02/2024 | **A&A** 682, A50 • <https://doi.org/10.1051/0004-6361/202347917> • 13 citations

Supermassive black holes in merger-free galaxies have higher spins which are preferentially aligned with their host galaxy

R. S. Beckmann; R. J. Smethurst; B. D. Simmons; A. Coil; Y. Dubois; I. L. Garland; C. J. Lintott; **G. Martin**; et al.
02/2024 | **MNRAS** 527, 10867 • <https://doi.org/10.1093/mnras/stad1795> • 24 citations

The formation of cores in galaxies across cosmic time - the existence of cores is not in tension with the Λ CDM paradigm

R. A. Jackson; S. Kaviraj; S. K. Yi; S. Peirani; Y. Dubois; **G. Martin**; J. E. G. Devriendt; A. Slyz; et al.
02/2024 | **MNRAS** 528, 1655 • <https://doi.org/10.1093/mnras/stae056> • 16 citations

A Physically Motivated Framework to Compare Pair Fractions of Isolated Low- and High-mass Galaxies across Cosmic Time

K. Chamberlain; G. Besla; E. Patel; V. Rodriguez-Gomez; P. Torrey; **G. Martin**; K. Johnson; N. Kallivayalil; et al.
02/2024 | **ApJ** 962, 162 • <https://doi.org/10.3847/1538-4357/ad19d0> • 11 citations

2023

Optimizing Roman's High Latitude Wide Area Survey for Low Surface Brightness Astronomy

M. Montes; F. Annibali; M. Bellazzini; A. S. Borlaff; S. Brough; F. Buitrago; N. Chamba; ...; **G. Martin**; et al.
06/2023 | **arXiv** arXiv:2306.09414 • <https://doi.org/10.48550/arXiv.2306.09414> • 11 citations

Identification of tidal features in deep optical galaxy images with convolutional neural networks

H. Domínguez Sánchez; **G. Martin**; I. Damjanov; F. Buitrago; M. Huertas-Company; C. Bottrell; M. Bernardi; J. H. Knapen; et al.
05/2023 | **MNRAS** 521, 3861 • <https://doi.org/10.1093/mnras/stad750> • 35 citations

Relaxed blue ellipticals: accretion-driven stellar growth is a key evolutionary channel for low mass elliptical galaxies ★

I. Lazar; S. Kaviraj; **G. Martin**; C. Laigle; A. Watkins; R. A. Jackson
04/2023 | **MNRAS** 520, 2109 • <https://doi.org/10.1093/mnras/stad224> • 22 citations

2022

Preparing for low surface brightness science with the Vera C. Rubin Observatory: Characterization of tidal features from mock images

G. Martin; A. E. Bazkiaei; M. Spavone; E. Iodice; J. C. Mihos; M. Montes; J. A. Benavides; S. Brough; et al.
06/2022 | **MNRAS** 513, 1459 • <https://doi.org/10.1093/mnras/stac1003> • 107 citations

The NewHorizon simulation - to bar or not to bar

J. Reddish; K. Kraljic; M. S. Petersen; K. Tep; Y. Dubois; C. Pichon; S. Peirani; ...; **G. Martin**; et al.
05/2022 | **MNRAS** 512, 160 • <https://doi.org/10.1093/mnras/stac494> • 58 citations

Radio AGN in nearby dwarf galaxies: the important role of AGN in dwarf galaxy evolution

F. Davis; S. Kaviraj; M. J. Hardcastle; **G. Martin**; R. A. Jackson; K. Kraljic; K. Malek; S. Peirani; et al.
04/2022 | **MNRAS** 511, 4109 • <https://doi.org/10.1093/mnras/stac068> • 55 citations

Extremely massive disc galaxies in the nearby Universe form through gas-rich minor mergers ★

R. A. Jackson; S. Kaviraj; **G. Martin**; J. E. G. Devriendt; E. A. Noakes-Kettel; J. Silk; P. Ogle; Y. Dubois

03/2022 | **MNRAS** 511, 607 • <https://doi.org/10.1093/mnras/stac058> • 42 citations

How the spectral energy distribution and galaxy morphology constrain each other, with application to morphological selection using galaxy colours ★

E. Uzeirbegovic; **G. Martin**; S. Kaviraj

03/2022 | **MNRAS** 510, 3849 • <https://doi.org/10.1093/mnras/stab3715> • 6 citations

2021

Introducing the LBT Imaging of Galactic Halos and Tidal Structures (LIGHTS) survey. A preview of the low surface brightness Universe to be unveiled by LSST

I. Trujillo; M. D'Onofrio; D. Zaritsky; A. Madrigal-Aguado; N. Chamba; G. Golini; M. Akhlaghi; ...; **G. Martin**

10/2021 | **A&A** 654, A40 • <https://doi.org/10.1051/0004-6361/202141603> • 66 citations

Introducing the NEWHORIZON simulation: Galaxy properties with resolved internal dynamics across cosmic time

Y. Dubois; R. Beckmann; F. Bournaud; H. Choi; J. Devriendt; R. Jackson; S. Kaviraj; ...; **G. Martin**; et al.

07/2021 | **A&A** 651, A109 • <https://doi.org/10.1051/0004-6361/202039429> • 298 citations

The Star Formation Rates of Elliptical Galaxies from Core-Collapse Supernovae

T. M. Sedgwick; I. K. Baldry; P. A. James; S. Kaviraj; **G. Martin**

06/2021 | **arXiv** arXiv:2106.13812 • <https://doi.org/10.48550/arXiv.2106.13812> • 10 citations

The origin of low-surface-brightness galaxies in the dwarf regime ★

R. A. Jackson; **G. Martin**; S. Kaviraj; M. Ramsøy; J. E. G. Devriendt; T. Sedgwick; C. Laigle; H. Choi; et al.

04/2021 | **MNRAS** 502, 4262 • <https://doi.org/10.1093/mnras/stab077> • 76 citations

Dark matter-deficient dwarf galaxies form via tidal stripping of dark matter in interactions with massive companions ★

R. A. Jackson; S. Kaviraj; **G. Martin**; J. E. G. Devriendt; A. Slyz; J. Silk; Y. Dubois; S. K. Yi; et al.

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The role of mergers and interactions in driving the evolution of dwarf galaxies over cosmic time

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2020

Formation of compact galaxies in the Extreme-Horizon simulation

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Black hole mergers from dwarf to massive galaxies with the NewHorizon and Horizon-AGN simulations

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Why do extremely massive disc galaxies exist today? ★

R. A. Jackson; **G. Martin**; S. Kaviraj; C. Laigle; J. E. G. Devriendt; Y. Dubois; C. Pichon

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Galaxy morphological classification in deep-wide surveys via unsupervised machine learning

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When galaxies align: intrinsic alignments of the progenitors of elliptical galaxies in the Horizon-AGN simulation ★

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2019

Massive spheroids can form in single minor mergers

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A flat trend of star formation rate with X-ray luminosity of galaxies hosting AGN in the SCUBA-2 Cosmology Legacy Survey

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The role of mergers in driving morphological transformation over cosmic time

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Identifying the progenitors of present-day early-type galaxies in observational surveys: correcting 'progenitor bias' using the Horizon-AGN simulation

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