DANIAL LANGEROODI

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Research Interests

Galaxy Evolution: feedback, quenching, role of environment, bursty star formation, reionization Interstellar Medium: chemical enrichment, dust properties and buildup Stellar Populations: stellar initial mass function, spectral energy distribution fitting

Education

| University of Copenhagen Ph.D. in Astrophysics | 2021–present |
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| Leiden Observatory M.Sc. in Astronomy and Cosmology | 2018-2020 |
| Sharif University of Technology B.Sc. in Physics | 2013–2018 |

AWARDS

Leiden University Excellence Scholarship (tuition fee waiver for my M.Sc. studies, worth €40,000)2018Bronze Medal, National Astronomy & Astrophysics Olympiad2011

Refereed Publications

9 first-author papers (3 ApJ Letters); 4 second- to fifth-author papers (2 ApJ Letters)
36 papers in total (1 Science, 1 Nature, 1 Nature Astronomy, 5 ApJ Letters, 1 ApJ Supplement)

h-index: 16 (all papers); 5 (first-author)

citations: 722 (all papers); 127 (first-author)

The full list of papers is available at the end of the CV

DATA PRODUCTS

JWST/NIRSpec

I have uniformly reduced the entire archival JWST/NIRSpec MSA data, along with the corresponding HST, JWST/NIRCam, and JWST/MIRI imaging

$[O III]4363\lambda$ Emitters

I have compiled the largest sample of $[O III]4363\lambda$ emitters, consisting of 1551 galaxies observed with JWST/NIRSpec, SDSS, and other ground-based instruments

Software

Genesis

a spectral energy distribution fitting code, particularly designed to fit the JWST/NIRSpec spectra of intermediateto high-redshift galaxies

Genesis-metallicity

non-parametric gas-phase metallicity and electron temperature estimation

Awarded Telescope Time

| JWST (NIRSpec) | (Co-I) 67 hours |
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| JWST (MIRI) | (Co-I) 221 hours $% \left($ |
| Observing Experience | |
| Nordic Optical Telescope (5 nights) | 2021-2024 |
| Major Collaborations | |
| MIRIC: MIRI Clusters (PI: E. Iani) The JWST/MIRI deep imaging survey of the lensing clusters Abell2744 and MACS0410 | since 2024 |
| European MIRI GTO high-z (PIs: G. Östlin & L. Colina) JWST/MIRI deep imaging of the Hubble Ultra-Deep Field | since 2021 |
| YSE: The Young Supernova Experiment Time-domain astrophysics with the Pan-STARRS telescopes | since 2021 |
| TDCOSMO: Time-Delay Cosmography Cosmology with strong gravitational lenses | since 2022 |
| STUDENT MENTORING (as primary supervisor) | |
| Jacob Markus (undergrad, University of Minnesota) | 2024–presnet |
| Kasra Hajian (Gruber-funded summer intern, ESO) | 2024 |
| Otto Stoklund (summer student, University of Copenhagen) | 2024 |
| Ida Schøsler (undergrad, University of Copenhagen) | 2023 - 2024 |
| Thomas Morthorst (undergrad, University of Copenhagen) | 2023 - 2024 |
| Mikkel Kallesøe (undergrad, University of Copenhagen) | 2023 - 2024 |
| William Mirsal (undergrad, University of Copenhagen) | 2023-2024 |
| TEACHING EXPERIENCE | |
| Teaching Assistant, General Relativity and Cosmology, M.Sc.–Ph.D. level | 2024 - 2025 |
| Teaching Assistant, General Relativity and Cosmology, M.Sc.–Ph.D. level | 2023 - 2024 |
| Teaching Assistant, General Relativity and Cosmology, M.Sc.–Ph.D. level | 2022-2023 |
| Journal Referee | |
| ApJ Letters | |

SERVICES

| Organizer of the DARK & DAWN diversity, equity, and inclusion meetings/talks | 2022-present |
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| Scientific organizing committee for the D-LOCKS galaxy evolution workshop, DTU, Denm | nark 2024 |
| Organizer of the DARK lunch talks | 2021-present |

TALKS (SINCE 2021)

I have given 20 talks, of which 7 are invited, of which 1 is an invited review and 1 is an invited lecture

| Invited Lecture at the "From nearby worlds to distant galaxies" summer school, ESO, Germany | 2025 |
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| Contributed talk at the "Evolution of Dust and Gas throughout Cosmic Time" conference, Hiroshima, Japan | ı 2024 |
| Contributed talk at "Unveiling the physics of galaxy and black hole formation with JWST", Paris, France | 2024 |
| Contributed talk at "Observing and Simulating Galaxy Evolution in the Era of JWST", Ascona, Switzerland | 2024 |
| Contributed talk at the STScI "Stars, Gas & Dust in the Universe" conference, Porto, Portugal | 2024 |
| Invited review talk at the "Extragalactic Astronomy at High Resolution" workshop, Lyngby, Denmark | 2024 |
| Contributed talk at the "ELT since in light of JWST" conference, Los Angeles, USA | 2023 |
| Contributed talk at the "The James Webb Space Telescope turns one" conference, Sesto, Italy | 2023 |
| Contributed talk at the European Astronomical Society Annual Meeting, Kraków, Poland | 2023 |
| Contributed talk at the "Shedding new light on the first billion years" conference, Marseille, France | 2023 |
| Contributed talk at the Annual Danish Astronomy Meeting, Fredericia, Denmark | 2023 |
| Invited lunch talk, Leiden Observatory, Leiden, The Netherlands | 2023 |
| Invited lunch talk, Kapteyn Astronomical Institute, Groningen, The Netherlands | 2023 |
| Contributed talk at the "Epoch of Galaxy Quenching" conference, Cambridge, UK | 2022 |
| Contributed talk at the "A Comprehensive View of Galaxy Evolution" conference, Sesto, Italy | 2022 |
| Contributed talk at the Annual Danish Astronomy Meeting, Roskilde, Denmark | 2022 |
| Invited talk at the Sapienza Astrophysics Group, Rome, Italy | 2022 |
| Contributed talk at the "Gravitational Wave Physics and Astronomy" workshop, Hannover, Germany | 2021 |
| Invited talk at the Eucild strong lensing working group | 2021 |
| Invited Transient Tuesday talk, University of Copenhagen, Copenhagen, Denmark | 2021 |
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