

Curriculum Vitae - Dian (Pipit) Triani

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Research Interests

Galaxy formation and evolution; large scale structure; numerical simulations; dust; stellar population models; spectral energy distributions of galaxies; ISM; galactic chemical evolution; stellar cluster formation and dynamics

Professional Employment

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| 2021 – present | Australian National University, Postdoctoral Research Fellow |
| Jul – Aug 2021 | Swinburne University of Technology, Internship
<i>AstroMedical innovation: Astronomy-inspired, data-driven approaches for medical imaging and diagnosis</i> |

Education

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| 2017 – 2021 | Swinburne University of Technology, PhD Astrophysics
Advisor: Prof. Darren Croton, Dr. Manodeep Sinha, A/Prof. Edward Taylor
Thesis: <i>Modelling the SED evolution of galaxies throughout cosmic time</i> |
| 2015 – 2016 | Institut Teknologi Bandung, Msc Astronomy
Advisor: A/Prof. Mahasena Putra, Prof. Mariano Mendez
Thesis: <i>Temporal and spectral X-ray analysis of AGN NGC 4051</i>
GPA 4.00 of 4.00 |
| 2014 – 2015 | University of Groningen, Exchange Program
Advisor: Prof. Mariano Mendez
Project: <i>Light curve and energy spectra of NGC 4051</i> |
| 2011 – 2015 | Institut Teknologi Bandung, BSc Astronomy
Advisor: A/Prof. Chatief Kunjaya, Prof. Mariano Mendez
Thesis: <i>Light curve and energy spectra of NGC 4051</i>
GPA 3.87 of 4.00 |

Awards & Scholarship

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| 2019 | ASTRO3D travel grant to represent ASTRO 3D at the Inclusive Astronomy 2 conference, Baltimore. |
| 2018 | IAU Travel Grant to attend the IAU Symposium #341, Japan |
| 2017 | Swinburne University Postgraduate Research Award |
| 2015 | Institut Teknologi Bandung Voucher Scholarship |
| 2014 | Erasmus Plus Scholarship |
| 2013 | Ganesha Prize Finalist, Institut Teknologi Bandung |
| 2012 | National Champion Scholarship Tanoto Foundation |

Academic presentations

Apr 2021	Dust in Galaxy Evolution, Online Seminar, Sumatera, Indonesia	Invited seminar
Jan 2021	CANDELS SED Fitting Telecon (Online)	Invited talk
Oct 2020	The Rise of Metals and Dust in Galaxies through Cosmic Time, Marseille, France (Online)	Contributed talk
Sep 2019	Institut Teknologi Bandung, Bandung, Indonesia	Colloquia
May 2019	Astro3D Science Meeting, Sydney, Australia	Contributed talk
Nov 2018	IAU Symposium #341, Challenges in Panchromatic Galaxy Modelling with Next Generation Facilities, Osaka, Japan	Contributed talk
Nov 2018	Gas Fuelling of Galaxy Structures Across Cosmic Time, Barossa Valley, Australia	Contributed talk
Jun 2016	International Symposium on Sun, Earth and Life, Bandung, Indonesia	Contributed talk
Jun 2015	New Era of Cosmic Distance Scale, Tokyo, Japan	Contributed talk

Professional Activities

2020	LOC Member: Harley Wood School for Astronomy (Perth, Australia)
2019 – 2020	ASTRO3D Equity, Diversity and Inclusion committee member
2019	SOC and LOC member: ASTRO3D Student Retreat
2018	SOC Member: ASTRO3D Annual Science Retreat (Perth, Australia)

Outreach Activities

2019	<i>Swinburne Open Day volunteer for Centre for Astrophysics and Supercomputing.</i> The role of the volunteer is to introduce our centre and the research that we are doing for our new and future students.
2018 - 2019	<i>AstroTour guide.</i> AstroTours are shows designed to educate and entertain audiences about astronomy. The sessions are held for students and the public.
2018	<i>In2Science mentor.</i> In2science is a partnership program that places university students as peer mentors in Victorian low socio-economic schools.

Media Appearances

Radio interviews:

- SBS Indonesian, 23/05/2018, “*Star Gazer*” ([Link to the interview](#))
- SBS Indonesian, 23/07/2019, “*Moon to Mars*” ([Link to interview](#))
- SBS Indonesian, 08/03/2020, “*The discovery of the mini moon shows us just how dynamic our universe is*” ([Link to interview](#))
- SBS Indonesian, 04/08/2020, “*Have you seen Jupiter, Mars and Venus? Look to the Sky! It’s a very good time for gazing at the stars and planets.*” ([Link to interview](#))
- SBS Indonesian, 08/01/2021, “*Building new frontiers in space. Another giant step.*” ([Link to interview](#))

Video Interview:

- Narasi TV, 14/06/2021, “*Peta Dark Matter: Disusun Demi Mengungkap Misteri Semesta*” (“*Dark Matter Map: Crafted to Uncover the Mysteries of the Universe*”). ([Link to interview](#))

Skills

Operating systems	Advanced knowledge of MAC OS, Microsoft Windows Experience with Linux
Programming	Advanced knowledge of Python and C Advanced knowledge of git version control Advanced knowledge of LaTeX
Spoken languages	Indonesian: native English: fluent

Teaching Assistant

2018-20	Introduction to Physics (Swinburne University)
2018-19	Introduction to e-Science (Swinburne University)
2018	Discovering the Universe (Swinburne University)
2015	Introduction to Cosmology (Institut Teknologi Bandung)
2015	Astrophysics Process 1 (Institut Teknologi Bandung)
2013-15	Mathematical Methods in Astronomy (Institut Teknologi Bandung)

Publications

Refereed:

- **D. P. Triani**, et al., 2021, MNRAS (in prep)
“*Panchromatic galaxy emission from a galaxy evolution model with a self-consistent dust computing*”,
- **D. P. Triani**, M. Sinha, D. J. Croton, E. Dwek, C. Pacifici, 2020, MNRAS, 503, 1005.
“*Exploring the relation between dust mass and galaxy properties using Dusty SAGE*”.
([Link to publication](#), [link to preprint](#)).
- **D. P. Triani**, M. Sinha, D. J. Croton, C. Pacifici, E. Dwek, 2020, MNRAS, 493, 2490.
“*The origin of dust in galaxies across cosmic time*”. ([Link to publication](#), [link to preprint](#))
Citation: 12 ([link to citation](#)).

Conference Proceedings:

- **D. Triani**, D. Croton, M. Sinha, 2020, Proceedings IAU Vol. 341, 119
“*Mentari: A pipeline to model the galaxy SED using semi analytic models*” (refereed)
([Link to publication](#), [link to preprint](#))
- **D. P. Triani**, M. I. Arifyanto, 2016, *J. Phys.: Conf. Ser.* **771** 012032.
“*Search for streams in thick disk and halo of the Milky Way*” ([Link to publication](#))
- **D. P. Triani**, M. I. Arifyanto, 2016, Prosiding Seminar Sains Antariksa, 2015, 200 ISBN: 978-602-6465-01-6
“*Stellar cluster modeling using Monte Carlo method to determine initial mass function*”

References

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|------------------------|--|
| • Prof. Lisa Kewley | lisa.kewley@anu.edu.au |
| • Prof. Darren Croton | dcroton@swin.edu.au |
| • Dr. Camilla Pacifici | cpacifici@stsci.edu |
| • Dr. Manodeep Sinha | msinha@swin.edu.au |