

# Giacomo Mantovan

## Curriculum Vitae

Università degli studi di Padova  
Dipartimento di Fisica e Astronomia  
Vicolo dell'osservatorio 3  
Padova, Italy  
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📄 <https://gmantovan.github.io/>  
🌐 GMantovan

## Educational Background

2020	<b>PhD in Astronomy</b> , <i>Università degli Studi di Padova</i> (hereafter Unipd), Padova, Italy.
2018 2020	<b>MSc in Astronomy</b> , <i>Unipd</i> , Padova, Italy.
2015 2018	<b>BSc in Astronomy</b> , <i>Alma Mater Studiorum - Università di Bologna</i> , Bologna, Italy.

## Theses

### PhD Thesis

<b>TITLE</b>	Validation of TESS exoplanet candidates orbiting Solar-type stars
<b>ADVISORS</b>	Professor Giampaolo Piotto, Dr Marco Montalto
<b>FUNDING AGENCY</b>	Unipd

### MSc Thesis

<b>TITLE</b>	Validation of candidate exoplanets discovered by TESS
<b>ADVISORS</b>	Professor Giampaolo Piotto, Dr Marco Montalto
<b>FINAL GRADE</b>	Summa Cum Laude

### BSc Thesis

<b>TITLE</b>	Classification of galaxies: morphological, photometric and kinematic characteristics
<b>SUPERVISOR</b>	Prof. Daniele Dallacasa
<b>FINAL GRADE</b>	102/110

## Research Interests

<b>EXOPLANETS</b>	<ul style="list-style-type: none"><li>○ Exoplanet Validation</li><li>○ Exoplanet Confirmation</li><li>○ Architecture of exoplanets</li><li>○ Exoplanet Atmospheres</li></ul>
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## Affiliations

### Scientific

**ITALY** Istituto Nazionale di Astrofisica Italiana (hereafter **INAF**)

**ITALY** Unipd

**UK** University of St Andrews, Centre for Exoplanet Science (hereafter **StACES**)

## Teaching Experience

### Teaching Assistant

2022  
2023

**Astrophysics Laboratory 2**, *Corso di Laurea magistrale in Astrophysics and Cosmology*, Unipd, Padova, Italy.

SUPERVISOR Prof. Luca Malavolta; Duration: 24 hrs

## Observing Experience and Proposals

### Observing Experience

2020

**Asiago telescope - Afosc**, 4 nights (2nd observer).

2021

**Asiago telescope - Echelle**, 2 nights (2nd observer).

2023

**Telescopio Nazionale Galileo (TNG) - HARPS-N**, 5 nights (1st observer), 7 nights (2nd observer).

### Observational Proposals

2023  
2024

**INAF AOT48 call**, 18.2hrs of HARPS-N to measure the 3D obliquity of two planets, through continuous RV monitoring, RM observations, **PI**.

2023  
2024

**INAF AOT48 call**, 17.5hrs of HARPS-N radial velocity follow-up, **PI**.

2023

**INAF AOT46 call [DDT]**, 7.5hrs of HARPS-N to measure the 3D obliquity of a young planet, through continuous RV monitoring, RM observations, **PI**.

2023  
2023.75

**ESO P111 call**, 28.5hrs of HARPS radial velocity follow-up, **PI**.

2022  
2023

**INAF AOT46 call**, 10hrs of HARPS-N radial velocity follow-up, **PI**.

2022  
2023

**INAF AOT46 call**, 60hrs of multi-band REM images, **PI**.

2022  
2023

**CNTAC 2022B call**, 2 nights of Magellan/IMACS images, **co-PI**.  
In charge of: scientific rationale, target selection, and technical description.

2021  
2022

**INAF AOT44 call**, 60hrs of multi-band REM images, **PI**.

## Studies and experiences abroad

2022

**European Union Program, Erasmus + traineeship**, University of St Andrews **StaCES** (Scotland), duration 6 months.

Research visiting period at the University of St. Andrews (Scotland), under the supervision of Professor Andrew Cameron, from 01/03/2022 to 31/08/2022.

## Skills

Programming **Python (Advanced)**, Fortran (Intermediate), Matlab (Intermediate), R (Foundation), HTML (Basic), Supermongo (Basic),  $\text{\LaTeX}$ (Advanced), BASH (Basic)

Tools GitHub

Softwares in data analysis DS9, TOPCAT

Operating systems Linux (Advanced), Microsoft Windows (Highly Specialised)

Office Suite LibreOffice (Advanced), Microsoft Office (Advanced)

Raste graphic editor GIMP (Intermediate)

## Languages

Italian Native

English C1 level

## Certificates

**English** *Language assessment result (CEFR Level C1)*  
OLS language assessment, Erasmus+ (EU), 7 Mar 2022  
*Attendance certificate (Academic English for PhD, 30hrs)*  
University of Padova Language Centre (IT), 1 Jan 2022  
*Attendance certificate (Intermediate Level B2)*  
School of Science, University of Padova (IT), 31 Jan 2020

## Grants

2023

**UCSC reimbursement (OWL Summer Program 2023)**, USA, University California Santa Cruz, state for euros 1800€.

2023

**Gini scholarship grant**, Padova, Fondazione Aldo Gini, state for euros 4600€, renounced.

2022

**COST Association reimbursement (Exoplanets and astro-statistical analysis techniques Summer School)**, Geneva, state for euros 1300€.

2021

**Erasmus+ for Traineeship grant**, Padova, University of Padova, state for euros 2400€.

2020

2024

**PhD Scholarship**, Padova, University of Padova, state for euros 46k€.

2018

**Maestro Elio Todeschi Scholarship**, Rovereto, Cassa rurale, state for euros 300€.

## Participation In Events

### Invited Talks

2023

**Unveiling the nature of TESS warm giants exoplanets amenable for atm. characterisation with JWST & Probing the orbital obliquity of tidally young planets through the Rossiter-McLaughlin effect**, *XIX Progress Meeting GAPS*, Torino (Italy).

Duration: 10 min

2023

**Analysis of the Rossiter-McLaughlin effect and atmospheric characterisation of TOI-5398**, *XIX Progress Meeting GAPS*, Torino (Italy).

Duration: 10 min

2023

**Validation of TESS exoplanet candidates orbiting solar analogues in the all-sky PLATO input catalogue**, *Telescopio Nazionale Galileo's talks*, Breña Baja (Spain).

Duration: 30 min

2022

**Validation of TESS candidates orbiting PLATO, Solar-analog star targets**, *StA-CES Journal Club*, StA-CES, St. Andrews (Scotland).

Duration: 30 min

### Workshops

2023

**Other Worlds Laboratory Summer Program 2023**, Santa Cruz, California (USA).

**TALK** The GAPS programme at the TNG. TOI-5398, the youngest compact multi-planet system composed of an inner sub-Neptune and an outer warm Saturn (12min)

### Conferences

2023

**TOE III 2023**, Centro de Astrofisica (Porto, Portugal).

**TALK** The GAPS programme at the TNG. TOI-5398, the youngest compact multi-planet system composed of an inner sub-Neptune and an outer warm Saturn (15min)

2022

**NAM 2022**, The University of Warwick (England).

**POSTER** Validation of TESS exoplanet candidates orbiting solar analogues in the all-sky PLATO input catalogue

2022

**Scottish Exoplanet/BD Spring meeting**, St. Andrews (Scotland).

**TALK** Validation of TESS candidates orbiting PLATO, Solar-analog stars (15min)

2021

**TESS Science Conference II**, US (Online).

**POSTER** Validation of TESS candidates orbiting Solar-type stars

2021

**PLATO Mission Conference**, Online.

**POSTER** Validation of TESS exoplanet candidates orbiting Solar-analog stars

## Conventions

2022

**Exoplanets and astrostatistical analysis techniques Summer School**, Geneva (Switzerland).

2021

**Scientific Communication in Astronomy School 2021**, Bertinoro, Italy.  
**TALK** SPRITZ talk (5min). 1st prize for best observational proposal competition.

2021

**RED School 2021 "Astrobiology Introductory Course"**, France (Online).  
**TALK** PhD project presentation (2min)

## Outreach

2022

**NameExoWorlds 2022**, Museo civico di Rovereto, Italy.  
Public, outreach talk on exoplanets (20 min)

2022

**NameExoWorlds 2022**, Liceo artistico Vittoria, Trento, Italy.  
Outreach talk on exoplanets, to a fourth-year high-school class (40 min)

2022

**Notte dei Ricercatori - 2022**, Padova, Italy.

2021

**Notte dei Ricercatori - Veneto Night 2021**, Padova, Italy.

## Publications

ADS [See here for an interactive and most updated list of all publications](#)

ORCID <https://orcid.org/0000-0002-6871-6131>

Google Scholar

## First-author peer-reviewed publications

- [1] **Mantovan, G.**, L. Malavolta, S. Desidera, T. Zingales, L. Borsato, G. Piotto, A. Maggio, D. Locci, D. Polychroni, D. Turrini, M. Baratella, K. Biazzo, D. Nardiello, K. Stassun, V. Nascimbeni, S. Benatti, A. Anna John, C. Watkins, A. Bieryla, J. J. Lissauer, J. D. Twicken, A. F. Lanza, J. N. Winn, S. Messina, M. Montalto, A. Sozzetti, H. Boffin, D. Cheryasov, I. Strakhov, F. Murgas, M. D'Arpa, K. Barkaoui, P. Benni, A. Bignamini, A. Bonomo, F. Borsa, L. Cabona, A. C. Cameron, R. Claudi, W. Cochran, K. A. Collins, M. Damasso, J. Dong, M. Endl, A. Fukui, G. Furész, D. Gandolfi, A. Ghedina, J. Jenkins, P. Kabáth, D. W. Latham, V. Lorenzi, R. Luque, J. Maldonado, K. McLeod, M. Molinaro, N. Narita, G. Nowak, J. Orell-Miquel, E. Pallé, H. Parviainen, M. Pedani, S. N. Quinn, H. Relles, P. Rowden, G. Scandariato, R. Schwarz, S. Seager, A. Shporer, A. Vanderburg, and T. G. Wilson. **The GAPS programme at TNG XLIX. TOI-5398, the youngest compact multi-planet system composed of an inner sub-Neptune and an outer warm Saturn.** *arXiv e-prints*, page arXiv:2310.16888, October 2023.
- [2] **Mantovan, Giacomo**, Marco Montalto, Giampaolo Piotto, Thomas G. Wilson, Andrew Collier Cameron, Fatemeh Zahra Majidi, Luca Borsato, Valentina Granata, and Valerio

Nascimbeni. **Validation of TESS exoplanet candidates orbiting solar analogues in the all-sky PLATO input catalogue.** *MNRAS*, 516(3):4432–4447, November 2022.

## References

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