

### DIANA SCOGNAMIGLIO

Argelander-Institut für Astronomie Auf dem Hügel 71 Bonn, 53121, Germany

Nationality: Italian

Date of birth: 16/11/1991

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#### **EDUCATION**

#### Dr. rer. nat. | Astrophysics

March 2019 - March 2022 (expected)

Argelander-Institut für Astronomie (AIfA) & IMPRS – Bonn, Germany

Thesis: *Preparing for weak lensing measurements with the Euclid space probe* 

Supervisors: Prof. P. Schneider, Dr. T. Schrabback

#### Research placement

January 2018 – March 2019

Astronomical Observatory of Capodimonte – Naples, Italy

Subject: *Ultra-Compact Massive galaxies in the Kilo Degree Survey* 

Supervisor: Prof. N. R. Napolitano

#### **Master of Physics** | *Astrophysics and Space Science*

September 2014 – January 2018

University of Naples Federico II - Naples, Italy

Thesis: The quest for cosmic strings: astrophysical methods

Supervisors: Prof. M. Capaccioli, Dr. O. Sazhina

#### **Bachelor of Physics** | *Physics*

September 2010 – September 2014

University of Naples Federico II - Naples, Italy

Thesis: La luce diffusa tra le galassie (The intracluster light)

Supervisor: Prof. M. Capaccioli

#### **AWARDS**

#### Ph.D. Scholarship

EU Horizon 2020 COMPET-2017 programme "Enabling Weak lensing Cosmology" at AIfA

#### **International Mobility Scholarship**

2015

Scholarship to support international study experiences

Lomonosov Moscow State University Subjects: Cosmology and Astrophysics

#### **Exchange Student program Scholarship**

2013

Scholarship to support international study experiences

Lomonosov Moscow State University Subjects: Cosmology and Astrophysics

#### TECHNICAL EXPERIENCE

**Teaching** 2019 – 2021

Organizing/facilitating labs, tutorial sessions, and telescope video tour, assisting with observing projects on AIfA telescope, grading homework assignments, lab reports

- Optical Observations, Summer Semester 2019/2020/2021
- Advanced Laboratory Course: Optical Astronomy, Winter Semester 2020/2021

Observational 2017

25 hours of observation within 2017 NEON School

- Nordic Optical Telescope La Palma, Spain
- Isaac Newton Telescope La Palma, Spain

#### Languages

- Italian: native
- English: professional

The Kilo Degree Survey

PI: K. Kujiken

- French: basic

#### Computational

- Astronomy Softwares: Galsim, SAOIMAGE, DS9, TopCAt, IRAF, SExtractor, LePHARE, MATLAB (basic)
- Programming languages: Python, HTML (basic)
- Document Creation: Microsoft Office Suite, LaTex, Jupyter Notebook

#### SCHOOLS, CONFERENCES AND TALKS (EXCLUDING REGULAR TALKS AT COLLABORATION MEETINGS)

#### Enabling Weak lensing Cosmology (EWC) 3rd Review Meeting (virtual) June 2021 Talk: WP 4 - Review of HST Data Reduction **Euclid Consortium meeting 2021 (virtual)** May 2021 Results of my Ph.D. project shown during A. Taylor's talk - Lausanne, Switzerland **European Astronomical Society Annual Meeting (EAS) (virtual)** June 2020 Contributed talk: Building the largest spectroscopic sample of UCMGs with the Kilo Degree Survey Leiden, The Netherlands Enabling Weak lensing Cosmology (EWC) 2nd Review Meeting (virtual) June 2020 Talk: WP 4 - Review of HST Data Reduction **Euclid Consortium meeting 2020 (virtual)** May 2020 Barcelona, Spain November 2019 C++ Python Programming Sessions 2 Istitut Astrophysique de Paris – Paris, France Euclid Organisational Unit "Shear" (OU-SHE) Quarterly Meeting October 2019 Talk: HST PSF Modeling – Marseille, France **Euclid Consortium meeting 2019** June 2019 Helsinki, Finland Hands-on multi-probe mass measurements in galaxy clusters June 2018 Physics Department of the University of Milan – Milan, Italy PhD School of Astrophysics "Francesco Lucchin" May 2016 Astronomical Observatory of Capodimonte – Naples, Italy Russian-Italian School on Astrophysics and Cosmology at Dubna September 2015 Invited talk: Cosmic strings: possible candidates on the radio and optical data – Dubna, Russia Black and Dark Topics in Modern Cosmology and Astrophysics September 2013 University of Dubna - Dubna, Russia INTERNATIONAL COLLABORATION, MEMBERSHIP, AND CO-PISHIP International Max Planck Research School (IMPRS) of Bonn and Cologne 2021 - present **Doctorate School**

CHARTER Pilot: CHARacterizing The Environment of Relic and ultra-compact massive galaxies 2021 Pls: D. Scognamiglio, C. Tortora, 12hrs of observations on Dolores@TNG awarded

2021

Euclid Consortium Member Consortium Leader: Y. Mellier	2019
INSPIRE: ESO Large Program PI. C. Spiniello, 154hrs of observations on X-Shooter@VLT awarded	2019
KiWi Collaboration Organizer of the weekly group meeting	2018 - present
CERTIFICATIONS	
Leadership in the Academic Context Online, Munich Center for Leadership GmbH	2021
Converting Challenges into Opportunities Online, University of San Diego – San Diego, United States of America	2020
Decision making: How to choose the right problem to solve Online, University of Leeds and Institute of coding – Leeds, United Kingdom	2020
The Scientific Writing Workshop Write About Science, WAS	2020
Outreach	
Skype a Scientist Avondale GATE Middle School, Rochester Hills – Michigan, United States of America (vir	March 2021
NASA Community College Network NASA Subject Matter Expert	January 2021 - present
Volunteer social media manager "Enabling Weak Lensing Cosmology" profile on Twitter	March 2019 - present

I hereby give consent for my data included in the curriculum vitae to be processed for recruiting purposes.

#### Euclid preparation: On the use of HST images as input for weak lensing image simulations

D. Scognamiglio, T. Schrabback, et al., in preparation, expected 2021

## Extending empirical constraints on the SZ-mass scaling relation to higher redshifts via HST weak lensing measurements of nine clusters from the SPT-SZ Survey at $z\gtrsim1$

H. Zohren, T. Schrabback, S. Bocquet, M.Sommer, F. Raihan, B. Hernández-Martín, O. Marggraf, B. Ansarinejad, M. B. Bayliss, L. E. Bleem, T. Erben, H. Hoekstra, B. Floyd, M. D. Gladders, F. Kleinebreil, M. A. McDonald, M. Schirmer, **D. Scognamiglio**, K. Sharon, and A. H. Wright, in preparation

#### INSPIRE: INvestigating Stellar Population In RElics II. First Data Release (DR1)

C. Spiniello, C. Tortora, G. D'Ago, L. Coccato, F. La Barbera, A. Ferré-Mateu, C. Pulsoni, M. Arnaboldi, A. Gallazzi, L. Hunt, N. R. Napolitano, M. Radovich, **D. Scognamiglio**, M. Spavone, S. Zibetti, A&A, 654, A136, 2021

#### INSPIRE: INvestigating Stellar Population In RElics - I. Survey presentation and pilot program

C. Spiniello, C. Tortora, G. D'Ago, L. Coccato, F. La Barbera, A. Ferré-Mateu, N. R. Napolitano, M. Spavone, **D. Scognamiglio**, M. Arnaboldi, A. Gallazzi, L. Hunt, S. Moehler, M. Radovich, S. Zibetti, A&A, 646, A28, 2021

# Nature versus nurture: relic nature and environment of the most massive passive galaxies at z<0.5 C. Tortora, N. R. Napolitano, M. Radovich, C. Spiniello, L. Hunt, N. Roy, L. Moscardini, **D. Scognamiglio**, M. Spavone, M. Brescia, S. Cavuoti, G. D'Ago, G. Longo, F. Bellagamba, M. Maturi and M. Roncarelli, A&A, 638L, 11, 2020

**D. Scognamiglio**, C. Tortora, M. Spavone, C. Spiniello, N. R. Napolitano, G. D'Ago, F. La Barbera, F. Getman, N. Roy, M. A. Raj, M. Radovich, M. Brescia, S. Cavuoti, L. V.E. Koopmans, K. H. Kuijken, G. Longo, and C. E. Petrillo, ApJ, 893, 4, 2020

#### Optical analysis of the CMB cosmic string candidate

O. Sazhina, D. Scognamiglio, M. V. Sazhin, M. Capaccioli, MNRAS, 485, 2, 2019

# The first sample of spectroscopically confirmed ultra-compact massive galaxies in the Kilo Degree Survey C. Tortora, N. R. Napolitano, M. Spavone, F. La Barbera, G. D'Ago, C. Spiniello, K. H. Kuijken, N. Roy, M. A. Raj, S. Cavuoti, M. Brescia, G. Longo, V. Pota, C. E. Petrillo, M. Radovich, F. Getman, L. V. E. Koopmans, I. Trujillo, G. Verdoes Kleijn, M. Capaccioli, A. Grado, G. Covone, D. Scognamiglio, C. Blake, K. Glazebrook, S. Joudaki, C. Lidman, C. Wolf, MNRAS, 481, 4728, 2018

#### Spectroscopic observation of 5 SN candidates

Elias-Rosa, N., Pursimo, T., Korhonen, H., Pastorello, A., the NEON school PhD students S. Derlopa, S., Marian, V., **Scognamiglio, D.**, Szigeti, L., Cabezas, M., Fernandes, C. S., McWhirter, P. R., Zervas, K., The Astronomer's Telegram, No. 10746, 2017

#### Observational constraints on the types of cosmic strings

O. Sazhina, D. Scognamiglio, M.V. Sazhin, EPJ C, 74:2972, 2014