DIANA SCOGNAMIGLIO

Argelander-Institut für Astronomie
Auf dem Hügel 71 Bonn, 53121, Germany
Nationality: Italian
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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   2019
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

Skills

Languages

- Italian: native
- English: professional
- 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

C++ Python Programming Sessions 2 November 2019
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

The Kilo Degree Survey 2021
PI: K. Kujiken

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

Euclid Consortium Member 2019
Consortium Leader: Y. Mellier

INSPIRE: ESO Large Program 2019
PI. C. Spiniello, 154hrs of observations on X-Shooter@VLT awarded

KiWi Collaboration 2018 - present
Organizer of the weekly group meeting

CERTIFICATIONS

Leadership in the Academic Context 2021
Online, Munich Center for Leadership GmbH

Converting Challenges into Opportunities 2020
Online, University of San Diego – San Diego, United States of America

Decision making: How to choose the right problem to solve 2020
Online, University of Leeds and Institute of coding – Leeds, United Kingdom

The Scientific Writing Workshop 2020
Write About Science, WAS

OUTREACH

Skype a Scientist December 2021
BASIS Independent Brooklyn Lower School – Brooklyn NY, United States of America (virtual)

Skype a Scientist March 2021
Avondale GATE Middle School, Rochester Hills – Michigan, United States of America (virtual)

NASA Community College Network January 2021 - present
NASA Subject Matter Expert

Volunteer social media manager March 2019 - present
"Enabling Weak Lensing Cosmology" profile on Twitter

REFERENCES

Prof. Dr. Henk Hoekstra
Leiden Observatory
✉ hoekstra@strw.leidenuniv.nl

Prof. Dr. Nicola N. Napolitano
School of Physics and Astronomy, Sun Yat-sen University
✉ napolitano@mail.sysu.edu.cn

Dr. Tim Schrabback
Argelander-Institut für Astronomie
✉ schrabba@astro.uni-bonn.de

LIST OF PUBLICATIONS

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$\gtrsim$1
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

Building the largest spectroscopic sample of Ultra-compact Massive Galaxies with the Kilo Degree Survey
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

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