

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name
Address
Telephone
Fax
E-mail
Nationality
Date of birth

Serena Manti

sere.manti@gmail.com

WORK EXPERIENCE

- Dates (from – to)
- Name and address of employer
 - Type of business or sector
- Occupation or position held
- Main activities and responsibilities

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31 MAY 2016 UP TO NOW

Scuola Normale Superiore, Piazza dei Cavalieri 7, 56126 Pisa (PI), Italy
"Trattamento teorico di molecole elementari e reazioni di interesse astrochimico", scientific director: Prof. V. Barone
Research Fellow (Assegnista di Ricerca)
Research activity in Astrochemistry, Physical Chemistry, Astrophysics

NOVEMBER 2011 – MAY 2016

Scuola Normale Superiore, Piazza dei Cavalieri 7, 56126 Pisa (PI), Italy
Corso di Perfezionamento in Fisica
PhD student. PhD Thesis: "Cosmic large scale structures: insights from radio astronomical experiments", 18th May 2016, supervisor: Prof. A. Ferrara, co-supervisor: Dr. S. Gallerani
Research activity, tutorship to undergraduate students, exams

APRIL 2015 – JULY 2015

SKA SA Office, The Park, Park Road, Oude Molen Village, Cape Town, South Africa
Research activity in the Radioastronomy group
Visiting student
Research activity in Astrophysics (Multi-frequency Data Reduction and Data Analysis of local astrophysical radio sources: calibration and imaging; studies of morphology, spectroscopy and polarization)

MARCH 2013 – JULY 2013

AIP (Leibniz Institute for Astrophysics), An der Sternwarte 16, 14482 Potsdam, Germany
Research activity in the Cosmology group
Visiting student
Research activity in Physics and Astronomy (Non-Gaussianities, Cosmic Web Classification)

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EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Level in national classification (if appropriate)

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- Level in national classification (if appropriate)

JANUARY 2013 – MARCH 2013

Scuola Normale Superiore, Piazza dei Cavalieri 7, 56126 Pisa (PI), Italy

Tutorship to undergraduate students of Scuola Normale Superiore
Lectures of Physics I (Mechanics, Thermodynamics, Analytical Mechanics, Special Relativity), resolution of exercises

AUGUST 2011 – SEPTEMBER 2011

Grosseto (GR), Italy

Private lessons in Physics
Lectures of Physics (Mechanics, Thermodynamics, Relativity): theory and exercises

JANUARY 2009 – OCTOBER 2009

Istituto di Radioastronomia (IRA) – Istituto Nazionale di Astrofisica (INAF), Bologna (BO), Italy

Internship for Bachelor Thesis
Analysis of radio maps and catalogs of Astrophysical radio and gamma sources

SEPTEMBER 2009 – JULY 2011

Master's degree course in Theoretical Physics at the University of Bologna, Italy

Theoretical Physics, Field Theory, Statistical Mechanics, Theory of Particle Physics, Special and General Relativity

Mean vote of exams: 30

Master's degree in Physics. Thesis: "Standard and peculiar singularities in Classical and Quantum Cosmology", 22th July 2011, supervisor: Prof. A. Kamenshchik

final Mark: *110/110 cum Laude*

SEPTEMBER 2006 – OCTOBER 2009

Bachelor's degree course in Physics at the University of Bologna, Italy

General Physics, Mathematical Analysis, Physics laboratory, Quantum Mechanics, Astrophysics, Nuclear and Subnuclear Physics, Structure of Matter, Mathematical methods for Physics

Mean vote of exams: 29.5

Bachelor's degree in Physics. Thesis: "Properties of Active Galactic Nuclei with high-energy emission", 16th October 2009, supervisor: Prof. G. Giovannini

final Mark: *110/110 cum Laude*

**PARTICIPATION TO
CONFERENCES/SCHOOLS**

10 - 11 March 2016:

"Astronomical Complex Organic Molecules in Different Environments", 1st Italian Workshop on Astrochemistry (Palazzo Strozzi, Firenze, Italy)

7 - 8 March 2016:

"Complex Organic Molecules in Space", 1st annual meeting of the WG1/WG4 COST action 1401 our astrochemical history (Scuola Normale Superiore, Pisa, Italy)

9 - 12 February 2016:

"ALMA Data Handling Workshop" (CNR, Bologna, Italy)

6 - 8 October 2015:

"X David International Workshop: Recomputing the Early Universe" (Scuola Normale Superiore). Contributed talk: "Searching for Radio Recombination Lines from obscured quasars with the SKA"

13 - 15 October 2014:

"IX David International Workshop: Beyond the Cosmic Frontier" (Scuola Normale Superiore). Contributed talk: "Searching for obscured quasars through hydrogen radio recombination lines"

28 July - 1 August 2014:

"569. WE-Heraeus-Seminar: Quantum Cosmology" (Physikzentrum, Bad Honnef, Germany). Poster: "Classical and quantum Big Brake cosmology for scalar field and tachyonic models"

22 - 24 October 2013:

"VIII David International Workshop: Light from the Cosmic Dark Ages" (Scuola Normale Superiore). Contributed talk: "Cosmic Web classification and linearisation with ALPT"

23 - 25 October 2012:

"VII David International Workshop: The First Galaxies in the Universe" (Scuola Normale Superiore). Contributed talk: "From singularities to non-Gaussianities: theoretical approach to Cosmology"

21 - 26 May 2012:

"Astrophysical Black Holes", SIGRAV Graduate School in Contemporary Relativity and Gravitational Physics (Villa Olmo, Como, Italy)

PUBLICATIONS

Papers published on refereed journals

Manti S., Gallerani S., Ferrara A., Feruglio C., Graziani L., Bernardi G., *Radio recombination lines from obscured quasars with the SKA*, 2016, MNRAS, 456, 98, DOI: <http://dx.doi.org/10.1093/mnras/stv2635>

Kamenschchik A. Yu., Manti S., *Classical and Quantum Big Brake Cosmology for Scalar Fields and Tachyonic Models*, 2015, Proceedings of the MG13 Meeting on General relativity. Edited by ROSQUIST KJELL ET AL. Published by World Scientific Publishing Co. Pte. Ltd., 1646, DOI: http://dx.doi.org/10.1142/9789814623995_0249

Kamenschchik A. Yu., Manti S., *Classical and quantum Big Brake cosmology for scalar fields and tachyonic models*, 2013, MULTIVERSE AND FUNDAMENTAL COSMOLOGY: Multicosmofun '12. AIP Conference Proceedings, 1514, 179, DOI: <http://dx.doi.org/10.1063/1.4791751>

Kamenschchik A. Yu., Manti S., *Scalar field potentials for closed and open cosmological models*, 2012, General Relativity and Gravitation, 44, 2205, DOI: <http://dx.doi.org/10.1007/s10714-012-1384-x>

Kamenschchik A. Yu., Manti S., Classical and quantum big brake cosmology for scalar fields and tachyonic models, 2012, Phys. Rev. D, 85, 123518, DOI: <http://dx.doi.org/10.1103/PhysRevD.85.123518>

Papers submitted/in preparation

Manti S., Bernardi G., Govoni F., Murgia M., Paladino R., Pizzo R. F., Smirnov O. M., *Observations of diffuse radio emission in the ABELL 399-401 galaxy cluster pair*, to be submitted

Manti S., Kitaura F.-S., *Cosmic Web classification with Augmented Lagrangian Perturbation Theory*, to be submitted

Manti S., Gallerani S., Ferrara A., Feruglio C., *Quasar UV luminosity function evolution up to $z=8$* , 2016, submitted to MNRAS, accepted

PERSONAL SKILLS AND COMPETENCES

*Acquired in the course of life and career
but not necessarily covered by formal
certificates and diplomas.*

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

ENGLISH

EXCELLENT

EXCELLENT

EXCELLENT

SPANISH

EXCELLENT

EXCELLENT

EXCELLENT

FRENCH

GOOD

GOOD

GOOD

I got PET (Preliminary English Test).

SOCIAL SKILLS AND COMPETENCES

*Living and working with other people, in
multicultural environments, in positions
where communication is important and
situations where teamwork is essential
(for example culture and sports), etc.*

I LIKE LIVING AND WORKING WITH OTHER PEOPLE, AND IN MULTICULTURAL ENVIRONMENTS. I THINK THAT POSSESSING GOOD SOCIAL SKILLS IS FUNDAMENTAL TO ACHIEVE THE RIGHT BALANCE IN A WORKING ENVIRONMENT.

FURTHERMORE, I BELIEVE IN HEALTHY COMPETITION AS AN INCENTIVE TO IMPROVE MYSELF AND GET THE BEST RESULTS IN EVERYTHING I DO.

ORGANISATIONAL SKILLS AND COMPETENCES

*Coordination and administration of
people, projects and budgets; at work, in
voluntary work (for example culture and
sports) and at home, etc.*

Scientific programming in C/C++, IDL, Python, Mathematica.

Excellent knowledge of CASA (Common Astronomy Software Applications) Package, Latex, Office package and the operating systems Linux Ubuntu and Windows.

I got ECDL (European Computer Driving Licence).

TECHNICAL SKILLS AND COMPETENCES

*With computers, specific kinds of
equipment, machinery, etc.*

ARTISTIC SKILLS AND COMPETENCES

Music, writing, design, etc.

I possess good writing and artistic skills.

I've been studying dance for many years and still study it: I believe this is a training experience for what concerns the importance of communication and group work.

OTHER SKILLS
AND COMPETENCES
Competences not mentioned above.

DRIVING LICENCE(S) Driving Licence of B type

ADDITIONAL INFORMATION

ANNEXES