

GIULIA VENTIMIGLIA

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CURRICULUM VITAE

1. PERSONAL DETAILS

Born: 9th August 1981, Catania, Italy
Nationality: Italian
Sex: Female
Marital status: Married
Tel: +49-089-30000-3715 (office); +49-176-62190994 (mobile)
E-mail: gventimi@mpe.mpg.de, giulia.ventimiglia@gmail.com
Position: Post-doc fellow
Research interests: Clusters of galaxies
Intracluster light, in particular diffuse population of intracluster stars
Dynamics of intracluster planetary nebulae (ICPN) as probe of galaxy evolution in nearby clusters
Large-scale structure of the Universe
Galaxy clustering and its evolution according to the different galaxy types

2. EDUCATION AND EXPERIENCE

Sep 2006 – Mar 2011 **PhD in Astronomy**
INTERNATIONAL MAX-PLANCK RESEARCH SCHOOL ON ASTROPHYSICS AT THE LUDWIG-MAXIMILIANS-UNIVERSITY (IMPRS) - MAX-PLANCK-INSTITUT FOR EXTRATERRESTRIAL PHYSICS, Garching, Germany
Graduating mark: magna cum laude
Thesis work on: “Kinematics of the Intracluster light in the core of Hydra I”
Supervisors: Prof. O. Gerhard (*Max-Planck-Institut for extraterrestrial Physics*), Dr. M. Arnaboldi (*INAF, Oss. Astronomico di Torino - ESO*)

Sep 2000 - Apr 2006 **Laurea in Physics** (master level)
UNIVERSITÀ DEGLI STUDI DI CATANIA, Catania, Italy
Graduating mark: 110/110 cum laude
Thesis work (developed mainly at *INAF, Oss. Astronomico di Brera*) on: “The dependence of galaxy clustering on luminosity, at $z \sim 1$, in the Vimos-VLT Deep Survey”
Supervisors: Dr. L. Guzzo (*INAF, Oss. Astr. di Brera*), Prof. L. Paternò (*Università degli studi di Catania - INAF, Oss. Astronomico di Catania*)

Jan - June 2004 **Erasmus University Scholarship**
UNIVERSITY COLLEGE OF LONDON, London, UK
Visiting student during the Spring/Summer term
Courses attended and passed: *Cosmology and Extragalactic Astronomy, Physics and Evolution of Stars*

2000

Diploma di maturità scientifica

Major: Math, Physics, Italian Literature, English and French Languages
LICEO SPECIALIZING IN SCIENTIFIC STUDIES 'ISTITUTO MARIA AUSILIATRICE',
Catania, Italy
Graduating mark: 100/100

3. EMPLOYMENT

March - June 2011

Post-doc Fellowship

MAX-PLANCK-INSTITUT FOR EXTRATERRESTRIAL PHYSICS, Garching, Germany

Sep 2007 - Aug 2009

ESO Studentship

**EUROPEAN ORGANIZATION FOR ASTRONOMICAL RESEARCH IN THE SOUTHERN
HEMISPHERE**, Garching, Germany

Thesis work on: "Kinematics of the Intracluster light in the core of Hydra I"
Supervisors: Dr. M. Arnaboldi (INAF, Oss. Astronomico di Torino - ESO),
Prof. O. Gerhard (Max-Planck-Institut für extraterrestrische Physik)

June - Aug 2006

Research fellowship

UNIVERSITÀ DEGLI STUDI DI CATANIA, Catania, Italy

Work on: "δ Scuti Variable Stars"

Supervisors: Prof. L. Paternò (Università degli studi di Catania - INAF, Oss.
Astronomico di Catania), Dr. Rita Ventura (INAF, Oss. Astr. di Catania)

4. TALKS, CONFERENCES AND SCHOOLSAugust 03 - 14 2009 **IAU General Assembly**, Rio de Janeiro, Brasil**JD1: "Dark matter in Early-type galaxies"**

Contributed talk: "The Formation of cD Halos: the Case of NGC 3311 in the
Hydra I Cluster"

JD2: "Diffuse Light in Galaxy Clusters"

Contributed talk: "The Kinematics of intracluster Planetary Nebulae in the
Hydra I Cluster"

July 15 - 25 2008

Enrico Fermi School – "Astrophysics of Galaxy Clusters", Varenna,
Italy

Contributed talk: "Intracluster Planetary Nebulae in the Hydra I Cluster of
Galaxies"

March 16 - 20 2008

"Galactic and Stellar Dynamics in the era of High Resolution Surveys",
Strasbourg, France

Poster: "Intracluster Stars in Hydra I Cluster"

June 25 - 29 2007

"Tracing Cosmic Evolution with Galaxy Clusters: six years later", Sesto
Pusteria, Italy

Poster: "Intracluster Stars in Nearby Galaxy Clusters"

5. OBSERVATIONAL EXPERIENCE

Visitor mode:

- August 1 - 3 2010 ***Very Large Telescope - UT1, FORS2 spectrograph, Paranal, Chile***
“The kinematics and nature of the diffuse light in compact groups”
Multi-slit imaging spectroscopy technique (MSIS, Gerhard et al. 2005) and long-slit spectroscopy
- March 28 - 30 2009 ***Very Large Telescope - UT1, FORS2 spectrograph, Paranal, Chile***
“The kinematics and origins of the diffuse light in the Centaurus cluster core”
Multi-slit imaging spectroscopy technique and long-slit spectroscopy
- May 8 - 9 2008 ***SUBARU Telescope, FOCAS spectrograph, Hilo, Hawaii***
“Tracing the subcluster merger in the coma cluster core with ICPN velocities”
Multi-slit imaging spectroscopy technique and long-slit spectroscopy

6. TECHNICAL SKILLS

- **Software:** ESO phase 2 software for service and visitor observations, Fortran 77, Galfit, Super Mongo, LaTeX, PPXF
- **Data reduction packages:** IRAF, IDL
- **Observing techniques:** MSIS, optical long-slit spectroscopy, optical imaging
- **Data analysis skills:** Data reduction of MSIS data, optical long-slit spectra and optical images, measure of stellar kinematics, detection and photometry of extragalactic Planetary Nebulae

7. LANGUAGES

- **Italian:** *Mother Tongue*
- **English:** *Very good knowledge, both spoken and written*
- **German:** *Basic knowledge, both spoken and written*
- **French:** *Basic knowledge, both spoken and written*

8. PUBLICATION LIST

Refereed papers:

- **Ventimiglia, G.**, Arnaboldi, M., Gerhard, O. 2010b, A&A, 528, 24, “The unmixed kinematics of intracluster stars in the core of the Hydra I Cluster”
- **Ventimiglia, G.**, Gerhard, O., Arnaboldi, M., Coccato, L. 2010a, A&A, 520, L9+, The dynamically hot stellar halo around NGC 3311: a small cluster-dominated central galaxy”
- Coccato, L., Arnaboldi, M., Gerhard, O., Freeman, K.C., Okamura, O., **Ventimiglia, G.**, Yasuda, N. 2010, A&A, 519, A95+, “Kinematics and line strength indices in BCG halos”

Proceedings:

- **Ventimiglia, G.**, Gerhard, O., Arnaboldi, M. 2010c, Hi, 15, 86V, "The formation of cD Halos: the case of NGC 3311 in the Hydra I Cluster"
- **Ventimiglia, G.**, Arnaboldi, M., Gerhard, O. 2010, accepted for publication in VA, [arXiv:1009.6062](https://arxiv.org/abs/1009.6062), "A Ly α survey of background galaxies at $z \sim 3.12$ "
- **Ventimiglia, G.**, Arnaboldi, M., Gerhard, O. 2008, AN, 329, 1057, "Intracluster Planetary Nebulae in the Hydra I Cluster"
- Di Mauro, M.P., Catanzaro, G., Christensen-Dalsgaard, J., Paternò, L., **Ventimiglia, G.**, Ventura, R. 2007, AIPC, 948, 455, " γ Bootis: Asteroseismology with 1-m Class Telescope"

Papers submitted and to be submitted:

- Arnaboldi, M., **Ventimiglia, G.**, Gerhard, O., Iodice, E., Coccato, L. 2011, submitted to A&A, "The build up of a cD halo: The case of NGC 3311 and a group of dwarf galaxies in disruption in the core of the Hydra I Cluster"
- **Ventimiglia, G.**, Gerhard, O., Arnaboldi, M., Coccato, L., 2011, to be submitted to A&A, "HCC 26: the characteristics of one of the dwarf galaxies in the core of the Hydra I cluster"

Garching, 28th of March 2011