

rubén sánchez-janssen

Curriculum Vitae as of September 1, 2012

Current Position

Sept. 2009 – **ESO Fellow**, European Southern Observatory, Chile
VLT Support Astronomer/VIMOS Instrument Fellow

Education

2005 - 2009 **Ph.D. Astrophysics**, *Instituto de Astrofísica de Canarias*, Spain.
Morphology and Star Formation of Galaxies in Nearby Galaxy Clusters
Advisors: J.A.L. Aguerri and C. Muñoz-Tuñón

2003 - 2005 **M.S. Astrophysics**, *Instituto de Astrofísica de Canarias*, Spain.
The Luminosity Function of Galaxies in the Hercules Cluster (A2151)
Advisors: J. Iglesias-Páramo and C. Muñoz-Tuñón

1999 - 2003 **B.S. Astrophysics**, *Universidad de La Laguna*, Spain.

Fellowships and Awards

2009 **ESO Fellowship**, European Southern Observatory

2004 **IAC Resident Astrophysicist Grant**, Instituto de Astrofísica de Canarias

2003 **Undergraduate Research Fellowship**, Canarian Academy of Science

2002 **IAC Undergraduate Summer Scholarship**, Instituto de Astrofísica de Canarias

Research Interests

Galaxy Evolution Across Mass and Environment

- ★ Galaxy Clusters, Fossil Groups, Galaxy Groups
- ★ Structure and Multiwavelength Properties of Galaxy Populations
- ★ Dwarf Galaxies
- ★ Extragalactic Globular Cluster Systems
- ★ Astronomical Instrumentation (Multi-Object Spectroscopy)

Student Supervision

Feb. 2011 – Stefan Lieder, ESO-Chile PhD student (w/ Mieske).
The Faint-End of the Galaxy Luminosity Function in Nearby Fossil Groups

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Research Projects Involvement

- ★ **The VIMOS Virgo Cluster Survey.**
The Baryonic Angular Momentum Content of Galaxy Halos
P.I. Puzia
A VLT/VIMOS spectroscopic survey of 6000 globular clusters in a mass-limited sample of 27 Virgo galaxies. Co-supervise the observing and data reduction strategy.
- ★ **AVOCADO: A Virtual Observatory Census to Address Dwarfs Origins**
P.I. Sánchez-Janssen
A UV-to-NIR study of 6500 nearby dwarf galaxies. Lead a team of 12 international researchers and coordinate the development of new VO analysis tools.
- ★ **The FOSSIL Groups Origins (FOGO) International Time Project**
P.I. Aguerri
52 observing nights awarded during semesters 2008B-2010A at La Palma Observatory. Lead the analysis of luminosity functions and a survey of merger features in the central galaxies.
- ★ **The HAWK-I Cluster Survey**
P.I. Lidman
A VLT/HAWKI survey of 10 spectroscopically confirmed clusters at $0.8 < z < 1.5$. Lead the analysis of luminosity functions and the study of interacting galaxy pairs.
- ★ **First Science with GTC, Consolider 2010**
P.I. Rodríguez-Espinosa
Team Member of a €6,500,000 Project aimed at delivering the first scientific results from the Spanish 10 m GTC telescope.

Observing Experience

- ★ **VLT/UT3 Support Astronomer (2009/09 – now).**
250 nights of VLT observing experience in the 0.35-24.5 μm range:
 - **VIMOS:** optical wide-field imaging, multi-object and integral-field spectroscopy.
 - **ISAAC:** NIR imaging, polarimetry and spectroscopy.
 - **VISIR:** MIR imaging and spectroscopy.
- ★ **More than 30 observing nights as PI or Co-I**
VLT, GMRT, WHT, AAT, TNG, INT, NOT, IAC80
- ★ **P.I. of 7 successful Observing Proposals**
 - VLT 8.2 m FORS multi-object optical spectroscopy (30h)
 - VLT 8.2 m VIMOS multi-object optical spectroscopy (3.5 nights)
 - VLT 8.2 m VIMOS integral field optical spectroscopy (10h)
 - WHT 4.2 m WYFFOS multi-object optical spectroscopy (2 nights)
 - AAT 3.9 m 2dF/AAOmega multi-object optical spectroscopy (5 nights)
 - TNG 3.5 m DOLORES optical imaging and multi-object spectroscopy (3 nights)
 - GMRT 21 cm interferometric observations (10h)

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Astronomical Instrumentation Projects

- ★ **VLTVIMOS Instrument Fellow**
Member of the Instrument Operations Team during the 2010-2012 VIMOS Upgrade Project. Led the analysis of atmospheric differential refraction effects on Operations.
- ★ **VLTFORS Nod-and-Shuffle**
Co-PI of a proposal to implement the Nod-Shuffle technique at the FORS spectrograph.
- ★ **WHTWEAVE Science Definition Team**
Member of the Galaxy Evolution Science Team of the new wide-field, multi-object spectrograph proposed for the 4.2 m WHT at La Palma.

Professional Service and Membership

- Peer Reviewer *The Astrophysical Journal*
- Chief Organiser *Deconstructing Galaxies: Structure and Morphology in the Era of Large Surveys.*
Awarded €10,000 for international meeting organisation, to be held at ESO-Chile in Fall 2013.
- Chief Organiser *1st AVOCADO Workshop, CIAS Workshop, Observatoire de Paris (Jun. 2011).*
Awarded €1,500 for workshop organisation.
- SOC & LOC *Galaxy Clusters in the Early Universe, ESO Conference, Pucón, Chile (Nov. 2009).*
- LOC *The Star Formation Impact, Estallidos 6th Workshop, Tenerife, Spain (Dec. 2007).*
- Full Member *Spanish Astronomical Society (SEA).*

Teaching Experience

- Fall 2007 **Teaching Assistant** – Universidad de La Laguna (60 hours).
Long-slit Spectroscopy: Data Reduction and Analysis Techniques
- Fall 2008 **Seminar** – Masters Degree in Astrophysics of the Universidad de La Laguna.
Fossil Galaxy Groups: Unveiling the Properties of the Most Extreme Environments
- Fall 2007 **Seminar** – Masters Degree in Astrophysics of the Universidad de La Laguna.
Clusters of Galaxies: Laboratories in the Cosmos

Outreach and Communication

- ★ *"NASA's Spitzer Finds Galaxy with Split Personality"*, NASA/Spitzer Press Release on our recent study of the Sombrero galaxy (Gadotti & Sánchez-Janssen 2012).
- ★ Member of the ESO-Chile Outreach Volunteer Team, aimed at the diffusion of astronomical knowledge in Chilean schools and to the general public.
- ★ Outreach interviews for several Chilean newspapers.

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Oral Contributions

International Conferences

- Jul. 2012 *Galaxy multiplicity in low-mass haloes: the baryonic content and star formation properties of dwarf galaxy groups*
Star Formation and Gas Reservoirs in Nearby Groups and Clusters, Schenectady, USA
- Jun. 2012 *AVOCADO and the Flavours of Dwarf Galaxies*
Star Forming Dwarf Galaxies, Lowell Observatory Workshop, Flagstaff, USA
- Apr. 2011 *Satellites of Satellites: Globular Cluster Systems as Tracers of Environmental Effects on Virgo Early-Type Dwarfs*
Dynamics of Low-Mass Stellar Systems, Santiago, Chile
- Dec. 2010 *AVOCADO: A Virtual Observatory Census to Address Dwarfs Origins*
IAU Symposium 277: Tracing the Ancestry of Galaxies, Ouagadougou, Burkina Faso
- Jun. 2010 *The Minimum Mass of Thin Disc Galaxies*
Dynamics and Evolution of Disc Galaxies, Moscow, Russia
- Nov. 2009 *Properties of Galaxy Disks in Nearby Galaxy Clusters*
Galaxy Clusters in the Early Universe, Pucón, Chile
- Jul. 2008 *Disentangling Galaxy Evolution in Galaxy Clusters*
VIII Scientific Meeting of the Spanish Astronomical Society (SEA), Santander, Spain

Relevant Seminars and Colloquia

- Jul. 2012 *AVOCADO and the Flavours of Dwarf Galaxies*
Columbia University Astrophysics Laboratory, New York, USA
- Nov. 2011 *Tidal Streams in the Hercules Cluster: The Dominant Role of Galaxy Pairs and Group Preprocessing in the Formation of Intracluster Light*
ESO Fellows Meeting, Santiago, Chile.
- Nov. 2010 *Satellites of Satellites: the History of Early-Type Dwarfs as Told by their Globular Cluster Systems*
Pontificia Universidad Católica de Chile, Santiago, Chile
- Jun. 2010 *Thin Discs, Thick Dwarfs and the Effects of Stellar Feedback*
Institut d'Astrophysique de Paris, Paris, France
- Sep. 2007 *Disentangling Galaxy Evolution in Nearby Galaxy Clusters*
Anglo-Australian Observatory, Sydney, Australia
- Mar. 2007 *Properties of the Bright and Dwarf Galaxy Populations in Nearby Clusters*
Estallidos 5th Workshop, Granada, Spain
- Jan. 2006 *Physical Properties of Nearby Galaxy Clusters in the SDSS*
Estallidos 4th Workshop, Madrid, Spain
- Dec. 2004 *Are Non X-ray Emitting Clusters Real Clusters of Galaxies?*
Estallidos 3rd Workshop, Tenerife, Spain
- Jan. 2004 *The Luminosity Function of Galaxies in the Hercules Cluster*
Estallidos 2nd Workshop, Granada, Spain

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References

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- ★ Dr. Thomas Puzia
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- ★ Dr. J. Alfonso L. Aguerri
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