

Michael Gordon Jones

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EMPLOYMENT

Instituto de Astrofísica de Andalucía
2016-2018 Post-doctoral researcher with L. Verdes-Montenegro
2018- Juan de la Cierva formación post-doctoral fellow

EDUCATION

2011-2016 **Cornell University**
 PhD & MS – Astronomy
2007-2011 **University of Cambridge – Fitzwilliam College**
 MSci & BA – Natural Sciences (Astrophysics)

SELECTED FIRST AUTHOR PUBLICATIONS

The ALFALFA HI mass function: A dichotomy in the low-mass slope and a locally suppressed knee mass

[Jones et al. 2018, MNRAS 477, 2-17](#)

The contribution of HI-bearing ultra-diffuse galaxies to the cosmic number density of galaxies

[Jones et al. 2018, A&A 614, A21](#)

The AMIGA sample of isolated galaxies XIII. The HI content of an almost "nurture free" sample

[Jones et al. 2018, A&A 609, A17](#)

The environmental dependence of the HI mass function in ALFALFA 70%

[Jones et al. 2016, MNRAS 457, 4393-4405](#)

When is stacking confusing?: the impact of confusion in deep HI galaxy surveys

[Jones et al. 2016, MNRAS 455, 1574-1583](#)

Spectroscopic confusion: its impact on current and future extragalactic HI surveys

[Jones et al. 2015, MNRAS 449, 1856-1868](#)

RESEARCH PROJECTS

AMIGA A study of the properties of isolated galaxies for use as a well characterised reference sample for HI studies of interacting galaxies in compact groups.

APPSS PI of an Arecibo-based project to measure the velocity field and detect infall onto the Pisces-Perseus supercluster filament.

PhD Thesis Statistical properties of the ALFALFA HI dataset. Main focuses are the impact of source confusion on present and future HI surveys, and the environmental dependence of the HI mass function. (*Advisors: M. Haynes & R. Giovanelli*)

RECENT TALKS & SEMINARS

Lorentz Cen.	Estimating the abundance of gas-bearing UDGs (Aug. '18 – Contrib.)
PHISCC	What drives evolution in compact groups (June '18 – Contrib.)
Kapteyn Inst.	HI-bearing ultra-diffuse galaxies and the HI mass function (Feb. '18 – Colloquium)
U. of Exeter	HI galaxy surveys (Oct. '17 – Seminar)
ICRAR	HI scaling relations of isolated galaxies (Aug. '17 – Seminar)
ICRAR	ALFALFA 100% HI mass function (Aug. '17 – Seminar)
IAA-CSIC	The impact of environment and confusion on the HI population (Feb. '17 – Seminar)
PHISCC	HI scaling relations of the most isolated galaxies (Feb. '17 – Contrib.)

OBSERVING TIME

Arecibo	About 20 nights observing experience with the 305m radio telescope for the ALFALFA collaboration, including the main survey observing and follow-up.
WIYN 3.5m	2 nights co-observing with pODI on the WIYN 3.5m optical telescope at Kitt Peak (NOAO) for ALFALFA follow-up.
NOT	3 nights solo observing with the ALFOSC instruments on the NOT at the Observatorio de Roque de los Muchachos.
GTC	25 hours of MEGARA time awarded for the pilot project “Are HI-bearing ultra-diffuse galaxies just the tip of the iceberg?”

TEACHING & OUTREACH

TA	Was a teaching assistant for introductory astronomy classes for 2 years. Held 2 weekly 1 hour sections, each containing 20-30 students.
Lectures	Guest lectures to undergraduate classes, including Cornell first-year writing seminars, and a 200 student introductory astronomy class.
UAT	Demonstrated observing, lectured and tutored students as part of the Undergraduate ALFALFA Team workshop at the Arecibo Observatory.
Workshops	Co-wrote and led undergraduate research workshops on Python and handling astronomy data with TOPCAT.
Ask an Astronomer	Answered questions weekly via email as part of Cornell Astronomy’s program. Produced podcasts for a general audience. Participated in highly successful Reddit Ask Me Anything event.
Local Outreach	Participated annually in local outreach events Museum in the Dark and Focus for Teens in Ithaca (Cornell).

ACADEMIC REFEREES

PhD Advisor	Mentor	Mentor
Martha Haynes Cornell University	Lourdes Verdes-Montenegro IAA-CSIC (Granada)	Riccardo Giovanelli Cornell University
