

Michael G. Jones

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Education

Cornell University

Ithaca, NY, USA

PHD & MS – ASTRONOMY

2011-2016

Supervisors: Martha P. Haynes & Riccardo Giovanelli

University of Cambridge – Fitzwilliam College

Cambridge, UK

MSCI & BA – NATURAL SCIENCES (ASTROPHYSICS)

2007-2011

Employment

University of Arizona

Tucson, AZ, USA

2020 - present

- Post-doctoral researcher with David Sand (Nov. 2020 – present)

Instituto de Astrofísica de Andalucía

Granada, Spain

2016 - 2020

- Juan de la Cierva formación post-doctoral fellow (May 2018 – Sep. 2020)
- Post-doctoral researcher with Lourdes Verdes-Montenegro (July 2016 – Apr. 2018)

Talks & Seminars

CONFERENCES

Aug. 2019	MIAPP , Ω_{HI} at $z \approx 0$ from ALFALFA	Contributed
Apr. 2019	SKA Science Meeting , Towards a FAIR understanding of compact group evolution	Contributed
Aug. 2018	Lorentz Center , Estimating the abundance of gas-bearing UDGs	Contributed
June 2018	PHISCC , What drives evolution in compact groups?	Contributed
Feb. 2017	PHISCC , HI scaling relations of the most isolated galaxies	Contributed
Nov. 2016	3GC4 , ALFALFA HIMF: Accounting for uncertainty and bias	Contributed
Jan. 2016	AAS , The effects of environment in ALFALFA & limitations of HI surveys	Contributed
Mar. 2015	PHISCC , Spectroscopic confusion: Its impact on HI surveys and stacking	Contributed

COLLOQUIA AND SEMINARS

Feb. 2018	Kapteyn Institute , HI-bearing ultra-diffuse galaxies and the HI mass function	Colloquium
Oct. 2017	University of Exeter , HI galaxy surveys	Seminar
Aug. 2017	ICRAR , HI scaling relations of isolated galaxies	Seminar
Aug. 2017	ICRAR , ALFALFA 100% HI mass function	Seminar
Feb. 2017	IAA , The impact of environment and confusion on the HI galaxy population	Seminar
July 2015	ASTRON , The environmental dependence of the HI mass function in $\alpha.70$	Seminar

First Author Papers

Evidence for ultra-diffuse galaxy formation through tidal heating of normal dwarfs

Accepted to ApJ

Jones et al 2021

The HI mass function of group galaxies in the ALFALFA survey

Jones et al 2020

MNRAS 494, 2090-2108

Evolution of compact groups from intermediate to final stages: A case study of the HI content of HCG 16

Jones et al 2019

A&A 632, A78

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

Jones et al 2018c

MNRAS 477, 2-17

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

Jones et al 2018b

A&A 614, A21

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

Jones et al 2018a

A&A 609, A17

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

Jones et al. 2016b

MNRAS 457, 4393-4405

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

Jones et al. 2016a

MNRAS 455, 1574-1583

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

Jones et al. 2015

MNRAS 449, 1856-1868

The relationship between accretion disc age and stellar age and its consequences for protostellar discs

Jones et al. 2012

MNRAS 419, 925-935

Co-author Papers

Satellites around Milky Way Analogs: Tension in the number and fraction of quiescent satellites seen in observations versus simulations

Karunakaran et al 2021

Accepted to ApJ

Star formation and quenching of central galaxies from stacked HI measurements

Guo et al 2021

Accepted to ApJ

MeerKAT-64 discovers wide-spread tidal debris in the nearby NGC 7232 galaxy group

Namumba et al 2021

MNRAS 505, 3795-3809

A diffuse tidal dwarf galaxy destined to fade out as a “dark galaxy”

Román et al 2021

A&A 649, L14

HI study of isolated and paired galaxies: the MIR SFR-M* sequence

Bok et al 2020

MNRAS 499, 3193-3213

WALLABY – An SKA Pathfinder HI Survey

Koribalski et al 2020

ApSS 365, 118

Morphology and surface photometry of a sample of isolated early-type galaxies from deep imaging

Rampazzo et al 2020

A&A 640, A38

Direct Measurement of the HI-halo Mass Relation through Stacking

Guo et al 2020

ApJ 894, 92

A Comprehensive Examination of the Optical Morphologies of 719 Isolated Galaxies in the AMIGA Sample

Buta et al 2019

MNRAS 488, 2175-2189

The environment of HI-bearing ultra diffuse galaxies in the ALFALFA survey

Janowiecki et al 2019

MNRAS 490, 566-577

The HI content of dark matter haloes at $z \approx 0$ from ALFALFA

Obuljen et al 2019

MNRAS 486, 5124-5138

The Arecibo Pisces-Perseus Supercluster Survey. I. Harvesting ALFALFA

O'Donoghue et al 2019

ApJ 157, 81

The Arecibo Legacy Fast ALFA Survey: The ALFALFA Extragalactic HI Source Catalog

Haynes et al 2018

ApJ 861, 49

The Enigmatic (Almost) Dark Galaxy Coma P: The Atomic Interstellar Medium

Ball et al 2018

AJ 155, 65

The ALFALFA “Almost Darks” Campaign: Pilot VLA HI Observations of Five High Mass-To-Light Ratio Systems

Cannon et al 2015

ApJ 149, 72

HighMass-High HI Mass, HI-rich Galaxies at $z \sim 0$ Sample Definition, Optical and H α Imaging, and Star Formation Properties

Huang et al 2015

ApJ 793, 40

The Clustering of ALFALFA Galaxies: Dependence on H I Mass, Relationship with Optical Samples, and Clues of Host Halo Properties

Papastergis et al 2013

ApJ 776, 43

Observing Time & Experience

- 2012-19 **Arecibo**, Over 300 hours of time awarded as co-PI of the project the Arecibo Pisces–Perseus Supercluster Survey. Over 100 hours observing with the ALFA and LBW instruments as part of the ALFALFA team for the main survey and associated projects.
- 2018 **GTC**, 25 hours of MEGARA time awarded for a PI project.
- 2018 **NOT**, 3 nights of observing with the ALFOSC instrument on the NOT in La Palma.
- 2021 **HST**, 20 orbit SNAP project to detect globular clusters in field UDGs.
- 2021 **GBT**, 3.75 hr of DDT awarded to obtain HI mass constraints on blue Virgo dwarf.

Awards & Honours

- 2017 **Juan de la Cierva fellowship**, a competitive, national-level (Spain) 2 year post-doctoral fellowship. *IAA*
- 2015 **Eleanor York Prize**, for service to the community and academic achievement. *Cornell*
- 2015 **Travel Grant**, for conference travel from Cornell's graduate school. *Cornell*
- 2011 **Newton Prize**, for excellence in sciences while contributing to college life. *Cambridge*
- 2011 **1912 Senior Scholarship**, for achieving a Class I degree in 4th year. *Cambridge*

Teaching & Outreach

Mentoring

Mentoring of Cornell undergraduate student Jeremy Borden working on investigating the Tully-Fisher relation in IllustrisTNG.

Teaching Assistant

2 years as a teaching assistant for introductory astronomy classes at Cornell. Responsibilities included leading 2 weekly 1 hour sections (up to 30 students each), as well as writing and grading homework and exams.

Guest Lectures

Performed guest lectures to several undergraduate classes at Cornell, including 1st year writing seminars and a 200-student astronomy class.

Undergraduate ALFALFA Team

Demonstrated observing, lectured and tutored students as part of the UAT workshop at Arecibo observatory.

Workshop Seminars

Co-wrote and led workshop seminars on Python and TOPCAT for undergraduates working on summer research projects.

Ask an Astronomer

Answered questions weekly as part of Cornell's Ask an Astronomer web service. Participated in a highly successful Reddit Ask Me Anything event.

Local Outreach

While at Cornell I participated annually in local outreach events Museum in the Dark and Focus for Teens.

Journal Club

Organised a journal club at the IAA for students and post-docs to discuss recent papers and background for upcoming seminars.