# GAGANDEEP S. ANAND

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#### **EDUCATION**

Institute for Astronomy, University of Hawai'i at Manoa

Expected- June 2021

PhD in Astronomy

Advisor: Professor R. Brent Tully

Institute for Astronomy, University of Hawai'i at Manoa

December 2018

M.S. in Astronomy

Boston University

M.A. in Astronomy

May 2015

May 2017

Vassar College B.A. in Physics & Astronomy, Minor in Mathematics

RESEARCH EXPERIENCE

#### University of Hawai'i at Manoa

August 2017–Present

Professor R. Brent Tully

- · Studying the resolved stellar populations of nearby galaxies with Hubble Space Telescope imaging
- · Determining distances to galaxies using stars near the tip of the red giant branch

# W.M. Keck Observatory

July 2017-August 2017

Dr. Luca Rizzi

· Enhanced the pipeline for photometric analysis of imaging data from the Hubble Space Telescope

# Boston University

July 2015–May 2017

Professor Elizabeth Blanton

· Examined bent radio galaxies to study the physics of the intracluster medium and to find high-redshift galaxy clusters

Vassar College

Sept. 2011–May 2015

Professor Fred Chromey

- · Collected and reduced spectra and CCD images for various research projects using the 0.8m campus telescope
- · Used Physics Of Eclipsing Binaries (PHOEBE) 2.0 to model contact binaries and hierarchical star systems

Colby College

May 2014-Aug. 2014

Professor Elizabeth McGrath

· Made use of CANDELS data to analyze progenitor galaxies to today's massive quiescent population

#### TEACHING EXPERIENCE

# Department of Astronomy

Sept. 2015 -May 2017

Teaching Fellow

Boston University

- · Astronomy 105- Alien Worlds (Spring 2016)
- · Astronomy 109- Cosmology (Fall 2015/Fall 2016)
- · Astronomy 203- Principles of Astronomy II (Spring 2017)

# Department of Physics & Astronomy

Astronomy Academic Intern

 $Vassar\ College$ 

Sept. 2014 -May 2015

- · Astronomy 101- Solar System Astronomy (Fall 2014)
- · Astronomy 105- Stars, Galaxies, & Cosmology (Spring 2015)

#### ACCEPTED PROPOSALS

# A Swift Look at the COBRA Sample: Confirming Clusters found via Bent Radio AGN Swift X-ray Telescope, 190.1 ks (2017a), Co-Investigator

#### REFEREED PUBLICATIONS

# Abell 623: Home to a Merger Induced Wide-Angle Tail Radio Source?

Anand, G., Blanton, E. L., Douglass, E., Randall, S. W., & Paterno-Mahler, R., In Preparation

# CANDELS: The Prevalence of Massive Quiescent Disks in the Early Universe

McGrath, E.J, [4 authors], Anand, G., [11 authors], In Preparation

# Peculiar Velocities of Galaxies Just Beyond the Local Group

Anand, G., Tully, R. B., Rizzi, L., Shaya, E., & Karachentsev, I. D., ApJ, Submitted

# The Distance and Motion of the Maffei Group

Anand, G., Tully, R. B., Rizzi, L., & Karachentsev, I. D., ApJL, 2019

# A Robust Tip of the Red Giant Branch Distance to the Fireworks Galaxy (NGC 6946)

**Anand, G.**, Rizzi, L., & Tully, R. B., **AJ**, 2018

#### The Distance to the Galaxy Coma P

Anand, G., Tully, R. B., Karachentsev, I. D., Makarov, D. I., Makarova, L.; Rizzi, L.; Shaya, E. J., ApJL, 2018

# The High-Redshift Clusters Occupied by Bent Radio AGN (COBRA) Survey

Paterno-Mahler, R., Blanton, E. L., Ashby, M. L. N., Brodwin, M., Wing, J. D., Decker, B., Golden-Marx, E., 2016, & *Anand*, *G.*, *ApJ*, 2017

#### CONFERENCE POSTERS & \*TALKS

#### Tip of the Red Giant Branch Distances to Nearby Galaxies

Stars: Birth and Death (GMT Community Science Meeting)- September 2018 The 21st Century HR Diagram (Space Telescope Science Institute)- April 2018

#### Chandra Observation of the WAT Radio Source/ICM Interaction in Abell 623

229th Meeting of the American Astronomical Society- January 2017 Chandra Science for the Next Decade- August 2016

#### Exploring the Structural Evolution of Massive Quiescent Galaxies

\*Keck Northeast Astronomy Consortium- November 2014

\*Colby Undergraduate Summer Research Retreat- July 2014

# Observations and Analysis of Orbital Period Changes in Contact Binaries

\*Keck Northeast Astronomy Consortium- October 2013

Vassar Undergraduate Research Summer Institute- July 2013

#### HONORS/AWARDS

Departmental Honors in Astronomy

Internship Grant Fund

Vassar College, May 2015

Vassar College, April 2014

Vassar College, March 2014

Vassar College, March 2014

# PROFESSIONAL MEMBERSHIPS

American Astronomical Society Junior Member, September 2016–Present

# PROFESSIONAL SERVICE

Referee Astrophysical Journal, July 2018–Present

# COMPUTATIONAL SKILLS

Operating Systems Windows, MacOS/OS X, UNIX/Linux

Computer Languages IDL, LATEX, Python

Astronomical Software CIAO, DOLPHOT, DS9, GALFIT, IRAF, MaxIm DL, PHOEBE, XSPEC