

CONTACT INFORMATION	George Mason University Physics and Astronomy Department 4400 University Dr Fairfax, VA 22030-4444, USA	<i>Phone:</i> (+1) 202 446 7915 <i>E-mail:</i> pcigan@gmu.edu <i>WWW:</i> <a href="http://research.endlessfernweh.com">http://research.endlessfernweh.com</a> <i>ORCID:</i> 0000-0002-8736-2463
EDUCATION	<b>New Mexico Institute of Mining and Technology</b> , Socorro, New Mexico, USA <i>Ph.D., Physics</i> <i>M.Sc., Physics</i>	<b>2015</b> <b>2012</b>
	<b>University of Wisconsin - Madison</b> , Madison, Wisconsin, USA <i>B.S., Physics, Astronomy-Physics</i>	<b>2005</b>
RESEARCH EXPERIENCE	<b><i>Senior Research Scientist, Contracting at the U.S. Naval Observatory</i></b> <ul style="list-style-type: none"> <li>• Supervisors: Prof. Shobita Satyapal (GMU), Dr. Megan Johnson (USNO)</li> <li>• Studying the physics and observational characteristics of AGN at milli-arcsecond scales</li> <li>• Monitoring AGN properties in relation to the fundamental reference frame</li> <li>• Investigating the relation between AGN and the dust in the surrounding ISM</li> </ul>	<b>2020–present</b>
	<b><i>Post-Doctoral Research Associate</i></b> <ul style="list-style-type: none"> <li>• Advisor: Prof. Haley Gomez, Cardiff University Physics Department</li> <li>• Studying the physics of dust and gas in galaxies, over cosmic time</li> <li>• ALMA and SOFIA observations of dust in SN 1987A</li> <li>• Phosphorus produced in supernovae: NIR spectroscopy in the Crab Nebula</li> <li>• FIR aperture photometry for the <i>H-ATLAS</i> catalogue</li> </ul>	<b>2015–2020</b>
	<b><i>Research Assistant</i></b> <ul style="list-style-type: none"> <li>• Advisor: Prof. Lisa Young, New Mexico Tech Physics Department</li> <li>• PhD Thesis: <b>Neutral Interstellar Medium Phases and Star Formation Tracers in Dwarf Galaxies as Probed By LITTLE THINGS</b></li> <li>• <i>Herschel</i> spectroscopy and photometry, to study the physics of gas and dust in dwarf irregulars</li> <li>• VLA HI line profile analysis</li> </ul>	<b>2010–2015</b>
	<b><i>Student researcher, ASTRON/JIVE Summer Student Programme</i></b> <ul style="list-style-type: none"> <li>• Advisor: Dr. Paolo Serra, ASTRON/Kapteyn</li> <li>• Reduced Westerbork HI data (Miriad)</li> <li>• Fitting of tilted ring model to investigate the physics of the galaxy disk</li> </ul>	<b>Summer 2009</b>
	<b><i>Research Intern</i></b> <ul style="list-style-type: none"> <li>• Advisor: Prof. J. S. Gallagher, University of Wisconsin-Madison</li> <li>• Optical spectroscopy data reduction and analysis: Kinematics of NGC 1275</li> </ul>	<b>Spring 2008</b>
	<b><i>Research Intern</i></b> <ul style="list-style-type: none"> <li>• Supervisor: Brian Babler, University of Wisconsin-Madison</li> <li>• Assisted with software testing for the data reduction package developed for PFIS (now the Robert Stobie Spectrograph), part of the South African Large Telescope</li> </ul>	<b>Spring 2005</b>
	<b><i>Summer Researcher, UW-Madison REU Program</i></b> <ul style="list-style-type: none"> <li>• Advisor: Prof. J. S. Gallagher</li> <li>• Reduced optical IFU spectra of the H<math>\alpha</math> filaments in Perseus A.</li> <li>• Used spectra to determine kinematics of gas in the system.</li> </ul>	<b>Summer 2004</b>
SOFTWARE EXPERIENCE	<b>Programming/Development Languages</b> Python (proficient / daily use), Matlab, Maple, IDL	

## Astronomy Software Packages

CASA, DS9, HIPE, AIPS, Topcat, GIPSY, IRAF, GAIA, Miriad

## Other

L<sup>A</sup>T<sub>E</sub>X, GitHub, GIMP, Inkscape

PROFESSIONAL TRAINING	<ul style="list-style-type: none"><li>• Seventh NAIC/NRAO Single-Dish Summer School (Arecibo, Puerto Rico) <b>July 10–17, 2013</b></li><li>• Summer School in Statistics for Astronomers IX (Penn State) <b>June 3–7, 2013</b></li><li>• Twelfth NRAO Synthesis Imaging Workshop (Socorro, NM) <b>June 8–15, 2010</b></li></ul>
FELLOWSHIPS	New Mexico Space Grant Consortium - Graduate Research Fellowship <b>2009–2011</b>
GRANTS	<ul style="list-style-type: none"><li>• IAU Travel Grant (€750) <b>Spring 2017</b></li><li>• New Mexico Tech Graduate Student Association Travel Grant (\$769) <b>Winter 2015 Cycle</b></li><li>• New Mexico Tech Graduate Student Association Travel Grant (\$1000) <b>Spring 2014 Cycle</b></li><li>• AAS International Travel Grant (\$1312) <b>Summer 2013</b></li><li>• New Mexico Tech Graduate Student Association Travel Grant (\$1000) <b>Summer 2013 Cycle</b></li><li>• New Mexico Tech Graduate Student Association Travel Grant (\$700) <b>Summer 2012 Cycle</b></li></ul>
AWARDS	<ul style="list-style-type: none"><li>• Leslie Fallon Award for Distinguished Teaching of Physics Laboratories <b>2010</b></li><li>• Inducted into the ΣΠΣ physics society <b>2010</b></li><li>• NASA/Wisconsin Space Grant Consortium Scholarship <b>2004–2005</b></li><li>• Doherty Award for Excellence in Astronomy <b>2005</b></li><li>• University League Scholarship <b>2005</b></li><li>• The National Dean’s List <b>2003</b></li></ul>
SUPERVISORY ROLES	Masters student summer project <b>2019</b> <ul style="list-style-type: none"><li>• Supervised M.Sc. student project to reduce and analyze NIR spectroscopic data</li></ul> Cardiff University student observing trips, Observatoire de Haute Provence <b>2017, 2018</b> <ul style="list-style-type: none"><li>• Participated as a professional astronomer, instructed students in fundamentals of observing</li><li>• Day-to-day supervision duties</li></ul> Co-supervised visiting masters summer students <b>2016</b> <ul style="list-style-type: none"><li>• Gave personal instruction on photometry concepts and <i>Herschel</i> data reduction</li></ul> ESO Astronomy Camp <b>2016, 2017, 2018</b> <ul style="list-style-type: none"><li>• Participated as a professional astronomer, to engage with students and answer questions</li><li>• Day-to-day supervision duties</li><li>• Delivered lecture on astrophotography</li></ul> Training PhD students on observing runs <b>2016, 2017, 2019</b> <ul style="list-style-type: none"><li>• Instructed first-time observers during runs at the JCMT, AAT, and WHT</li></ul>
INVITED TALKS	<ul style="list-style-type: none"><li>• Seminar, University of Hertfordshire <b>Fall 2019</b> <i>Cosmic Dust: New Insights from SN 1987A</i></li><li>• Seminar, University of New Mexico <b>Fall 2013</b> <i>LITTLE THINGS: Far-Infrared Lines in Normal Dwarf Galaxies</i></li></ul>
LANGUAGE PROFICIENCY	<ul style="list-style-type: none"><li>• English – Native</li><li>• Japanese – Conversationally Fluent</li><li>• Spanish – Some</li></ul>
OPEN-SOURCE	<i>multicolorfits</i> : A python module and GUI to combine fits files into multi-color images <a href="https://github.com/pjcigan/multicolorfits">https://github.com/pjcigan/multicolorfits</a>