

# Matthew J. Zagursky

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CONTACT INFORMATION	Department of Astronomy The University of Maryland College Park, MD 20742 USA	Voice: (240) 351-4381 Fax: (301) 314-9067 E-mail: <a href="mailto:mzagursk@umd.edu">mzagursk@umd.edu</a> Web: <a href="http://www.mattzag.com">www.mattzag.com</a>
RESEARCH INTERESTS	Extragalactic astronomy, dark matter, dark energy, galaxy mergers, gravity, relativity, web applications, cosmological parameters, general astronomy, physics, optics, observational astronomy, theoretical astronomy, instrumentation	
EDUCATION	The University of Maryland, College Park, Maryland, USA  B.S., Physical Sciences and Physics, Expected May 2009 <ul style="list-style-type: none"><li>• With High Honors</li><li>• Concentrations in Astronomy, Atmospheric Sciences, &amp; Math</li><li>• Professional Physics Track</li></ul>	
AWARDS AND HONORS	The University of Maryland, College Park, Maryland, USA <ul style="list-style-type: none"><li>• Henry E. Fleming Scholarship, 2006 - Present</li><li>• President's Scholarship, 2005 - Present</li><li>• Ray Hoyt Scholarship, 2005 - Present</li><li>• Wal-Mart Scholarship, 2005</li></ul>	
TEACHING EXPERIENCE	The University of Maryland, College Park, Maryland, USA  <i>Instructor</i> August 2007 - Present <ul style="list-style-type: none"><li>• CPSP299D - Web Design and Internet Applications<ul style="list-style-type: none"><li>• Course Instructor, August 2007 - Present</li></ul></li><li>• Astronomy &amp; Physics Tutor</li></ul> <i>Teaching Assistant</i> August 2007 - Present <ul style="list-style-type: none"><li>• ASTR120 - Introduction to Astronomy (Majors)<ul style="list-style-type: none"><li>• Teaching Assistant, August 2008 - Present</li></ul></li><li>• ASTR100 - Introduction to Astronomy (Non-Majors)<ul style="list-style-type: none"><li>• Teaching Assistant, August 2007 - May 2008</li></ul></li><li>• CPSP229D - Web Design and Internet Applications<ul style="list-style-type: none"><li>• Teaching Assistant, August 2006 - May 2007</li></ul></li></ul>	
RESEARCH EXPERIENCE	The University of Maryland, College Park, Maryland, USA  <i>Research Assistant</i> August 2006 - Present Mentor: Dr. Stacy McGaugh <ul style="list-style-type: none"><li>• Topic: Rotation Curves, Galaxy Structure, &amp; Dark Matter Characteristics of Galaxies</li></ul> <i>*This project also serves as a senior thesis</i>  <i>Research Assistant</i> Summer 2007 Mentor: Dr. Rosemary Killen <ul style="list-style-type: none"><li>• Topic: The Exosphere of Mercury &amp; the NASA Messenger Mission</li></ul>	

National Optical Astronomy Observatory, Tucson, Arizona, USA

*NOAO REU Student*

Summer 2008

Mentor: Dr. Jennifer Lotz

- Topic: Quantifying the Morphology and Photometry of Tidal Tails from Galaxy Mergers

COMPUTER  
EXPERIENCE

Knowledge of HTML, XHTML, JavaScript, CSS, PHP, Perl, MySQL, C, IDL, GIPSY, IRAF, GNU PLOT, SM, R, Matlab, Mathematica, L<sup>A</sup>T<sub>E</sub>X, Word Processing/Presentation Software

Knowledge of MS Windows, Linux/UNIX, & Mac Operating Systems

OBSERVING  
EXPERIENCE

Kitt Peak National Observatory, NOAO, 31 Total Nights

Mayall 4m Telescope, 17 Nights

- Instruments: RC Spectrograph, NEWFIRM

2.1m Telescope, 10 Nights

- Instruments: SQUIID, GoldCam, Direct CCD

WIYN 3.5m Telescope, 1 Night

- Instrument: SparsePak

WIYN 0.9m Telescope, 2 Nights

- Instrument: MOSAIC

0.9m Coude Feed Telescope and Spectrograph, 1 Night

TALKS

Science Talks

1. *Investigating Galaxy Mergers with IGNITE*, NOAO REU Presentation, 2008 August 14

Public Talks

1. *Dark Matter in Spiral/Disk Galaxies: Discovery and Current Observations*, University of Maryland Open House Guest Lecture, 2008 January 20

PRINTED  
PRESENTATIONS

Posters

3. *Investigating Galaxy Merger Signatures with IGNITE*, Presented at AAS Winter Meeting, 2009 January 5

2. *Constraining Maximum Disk Velocities of High-Mass Galaxies*, Presented at AAS Winter Meeting, 2008 January 8

1. *Surface Photometry and Rotation Curves of Low Surface Brightness Galaxies to Model the Dark Matter Halo*, Presented at the University of Maryland Scholars Academic Showcase, 2007 May 4

PUBLICATIONS

Accepted

1. *Kinematic and Photometric Evidence for a Bar in NGC 2683*, Kuzio de Naray, R., **Zagursky, M.J.**, & McGaugh, S.S., Accepted to AJ

In Draft

1. *Mass Modeling and Rotation Curves of Medium to High Surface Brightness Galaxies*, **Zagursky, M.J.**, McGaugh, S.S., & Schombert, J.

SOCIETIES AND  
SOCIAL  
ACTIVITIES

Professional Organizations

American Astronomical Society (2007 - Present)

Student Organizations

AstroTerps, President (2006 - Present)

Society of Physics Students (2007 - Present)

PUBLIC  
OUTREACH

The University of Maryland, College Park, Maryland, USA

University of Maryland Open House Volunteer, 2006 - Present

Maryland Day, 2006 - Present

- Solar System Scale Walk, 'Toys In Space', & 'Supernova Spin Art' Project Managers

College Park Scholars Service Day Team Leader, 2005 - 2008

MEDIA  
APPEARANCES

Television Interview by the American Institute of Physics, "Lunar Eclipses", Produced as a Nationwide News Story, Aired Summer 2007

SPECIAL PROJECTS

*The Eratosthenes Method of Finding Earth's Circumference*, Website and Data Submission Designer, Sponsored by NASA, 2007 June 12