<u>Curriculum Vitae</u> TIZIANA DI MATTEO

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Education

<u>1995–1998:</u>	<u>Ph.D.</u> , Trinity College and Institute of Astronomy, University of Cambridge, UK
$\underline{1992}-\underline{1995}$:	B.Sc. (Honours) in Astrophysics, 1st Class,
	University College London, University of London, UK

Positions

2014 Full Professor, Physics Department, Carnegie Mellon University
2011 Visiting Professor, Oxford University, UK (Sabbatical leave; Dec.-Aug. 2011)
2009-2014 Associate Professor with tenure, Physics Department, Carnegie Mellon University
2005-2009 Associate Professor w/o tenure, Physics Department, Carnegie Mellon University
2003-2005 C3 Professor, Max-Planck-Institut für Astrophysik (October 2003 - January 2005)
2001 - 2003 Long term Research Associate, Max-Planck-Institut für Astrophysik (October 2001 - October 2003)
1998-2001: Chandra Postdoctoral Fellow, Theoretical Astrophysics Division, Harvard University
2000: Invited visitor, Institute of Astronomy, University of Cambridge (May 2000)
1995-1998: Graduate Fellow, Trinity College, University of Cambridge

Awards and Honors

<u>2014</u> Americal Physical Society (APS) Fellowship

2011 Urania E. Stott Fellowship Grant (Pittsburgh Foundation)

2009 Moore Foundation, Computational Resources and Grant

<u>2008</u> Carnegie Science Award of Excellence (Emerging Female Scientist)

<u>2006</u> Berkham Faculty Grant (Carnegie Mellon University)

<u>1998–2001:</u> Chandra Fellowship, Harvard University

<u>1999:</u> Royal Astronomical Society Michael Penston Prize for best doctoral theses in the UK

 $\underline{1995-1998}: \mbox{Trinity College Research Scholarship and PPARC Studentship, University of Cambridge}$

 $\underline{1992} - \underline{1995} \text{ Herschell, Huggins and Halley Prize for best performance in Physics and Astronomy, University of London } \underline{1992} - \underline{1995} + \underline{1992} - \underline{1992} + \underline{1992} - \underline{1992} + \underline{1992}$

Professional Service

2016 Collaborator on NASA MIDEX proposal for STAR-X mission
2016 Rapporteur, Rebekka Bieri Thesis Committee, Institut d'Astrophysique de Paris
2015 Member, NSF Advanced LIGO computing review
2014-date Member, The Blue Waters Science and Engineering Team Advisory Committee (BW SETAC, NSF)
2013 Chair, Astronomy - committee for IUPAP Conference on Computational Physics
2013-14 Member, NASA Hubble Space Telescope Proposal Review Panel
2012-date Member, LSST Dark Energy Sciente Collaboration, Cosmological Simulation Task Force
2012-date Member, NASA Theory Program (ATP) Review Panel

2009-2010 Member of Board of Advisors for IMAX production, Journey to a Black Hole, OmniCosm Studios 2009-date Member of Carnegie Science Center Awards of Excellence Committee

2009-2010 Member of NSF High Perfomance Computing (HPC) Task Force

2008-2010 Member, NSF Peer Review Panels

2009 Elected Member of National Research Council (NRC) and National Academy of Sciences, Astro2010 Decadal Survey Panel, Physics and Astronomy

<u>May 2009</u> Member of the Division of Computational Physics (DCOMP) of the Ametican Physical Society (APS) <u>February 2009</u> AAAS Annual Meeting, Chicago

2009-date University of Pittsburgh, Thesis Committee for Mei-Yu Wang (Supervisor, Andrew Zentner)

 $\underline{2007\text{-}\text{date}}$ NASA Postdoctoral Program (NPP) Reviewer

2006-2007 NASA Chandra Fellowships Selection Committee

2006-2007 Veni Fellowship External Reviewer

 $\underline{2005\text{--date}}$ Peer Reviewer for Nature, Science

<u>2003–date</u> Peer Reviewer for NASA-Chandra X-ray Observatory Proposals

2003–2004 European Association for Research in Astronomy (EARA) Deputy for Max-Planck-Institut für Astrophysik 1998–date: Peer Reviewer for the Astrophys. J., MNRAS, A&A, Nature, Science - Book Reviewer for Am. J. Phys.

Scientific Conference Organization

-Co-Chair, Physics Track Committee "Platform for Advanced Scientific Computing" (PASC17), June 2017

-"Looking back at the first billion years with next-generation observatories", EWASS 2017

-"The Galaxy-Halo Connection", SnowPac, Salt Lake City, March, 2016

- -"Essential Cosmology for the next generation" Cosmology on the Beach, Jan. 2016
- -"Demographics and environment of AGN from multi-wavelength surveys", Chaina, Crete, Sept 21, 24 2015.

-LSST/CMU meeting Innovative Cosmological Simulations", Pittsburgh (July 3-5, 2015

-XXVI IUPAP Conference on Computational Physics (CCP2014), Boston, (Aug. 11-14, 2014)

-COSPAR 2012: Probing the High-z Universe Meeting (July 14-22, 2012)

-Conference on Cosmic Chemical Evolution meeting in St. Michael's, (June 2-4,2010)

-Chandra X-ray Center workshop: Accretion Processes in X-rays: from White Dwarfs to Quasars, (July 13-15, 2010)

-38th COSPAR Scientific Assembly Bremen, Germany, (18-25 July 2010)

-Durham workshop "What drives the growth of black holes?" (19-22 April 2010)

-Monster's Fiery Breath, Madison Wisconsin, (1-6 June 2009)

-Great Lakes Cosmology Workshop, Organizing Committee, (June 2008)

–Principal Organizer of mini Workshop on "Black holes, stars and galaxies: Observations and Simulations", Max Planck Institut, (December 2004)

University Service - Carnegie Mellon University

$\bullet \underline{Physics \ Department}$

- Co-Chair, Cosmology Faculty Search Committee (2015-2016)
- Graduate Student Oral Exam Committee (2013-2015)
- Advisory Board Planning Committee (2012)
- McWilliams Cosmology Center Faculty Search Committee (2007-2013)
- Graduate Student Admission Committee (2006-2009)
- Graduate Student Written Exam Committee (2010-2011)
- McWilliams Cosmology Center Faculty Search Committee (2007-date)
- McWilliams Cosmology Center Postdoctoral Fellowship Committee (2007-2011)
- Graduate Students Thesis Committee (Gabriel Altay, Kivanc Sabirli, Colin DeGraf, Yu Feng, 2007-date)
- Graduate Student Oral Exam Committee (2007)
- Biological Physics Faculty Search Committee (2006-2007)

•<u>Mellon College of Science & University</u>

- Internal review committee for NSF Major Research Instrumentation Program (MRI) (2016-)
- Pittsburgh Supercomputer Center (PSC) Director Search Committee (2016-)

– Faculty Senate (2015–)

- MCS Non-Tenure Ad-Hoc Review Committee (2015)
- High Profile meetings with Donors and potential Donors (2007–date)
- University Research Review Committee (2010-2012)
- Review Panel for MCS Mulach Scholarship Selection Committee
- Selection Committee for Churchill and Marshall Foundation Fellowships (2009-2010)
- MCS Non-tenure Ad-Hoc Review Committee (2007)
- Presidents Day, Research Highlight Talk (2010)

- Front Page CMU News Stories, (2007, 2009, 2011, 2015), Invited Feature Article on 'Carnegie Mellon Today', (2008) and For McWilliams Center (2012)

Reasearch Advising

• Graduate Students:

 $\underline{\text{June 2016-date}}$ Research Advisor for Aklant Bhowmick, Kuan-Wei Huang, Chris Kervick

<u>Sept 2015-2016</u> Research Advisor for Dacen Waters

Summer 2014-date Co-advisor of Statistics Student Jisu Kim (2nd year, working with Jessica Cisewski, Alessandro Rinaldo, Larry Wassermann)

Summer 2013-2014 Research Advisor for Evan Tucker (1st year, research fellowship student)

Dec 2012-date Ananth Tenneti (co-advised with Rachel Mandelbaum)

 $\underline{\text{Dec}\ 2012\text{-}2014}$ Research Advisor for Mao-Shen (Terrence) Liu

Sept 2009-2014 Research Advisor for Yu Feng (co-advised with R. Croft, PhD August 2014, Now postdoc at Berkely) Sept. 2010–Dec. 2010 Grad. Research Fellowship Katie Robbins

<u>August 2009 – August 2010</u> Research Advisor for Grad. Student Matt Oborski

<u>August 2007 – 2012</u> Research Advisor for Grad. Student Colin DeGraf, (Postdoctoral Fellowship at Hebrew University, Avishai Dekel)

 $\underline{July\ 2005–2007}$ Research Advisor for Grad. Student Shiu Fai (Frankie) Li

December 2005–May 2006 Research Advisor for Graduate Student Prabhanshu Shekhar

 $\underline{2007-2009}$ Suman Bhattarjee, Suchetana Chatterjie (PITT), (co-advised with Arthur Kosowski, UPITT, now postdoc at Yale)

$\bullet \underline{\textbf{Undergraduate Students}}$

<u>Fall 2016</u>– Josh Furhman (co-advised with Fred Rasio at Northwestern)
<u>Summer 2015-2016</u> Joanne Hsueh, Joseph Kania
<u>May 2013-August 2014</u> Samuel Greess
<u>January 2013-May 2013</u> Andrew Ray
<u>January 2011-May 2011</u> Physics Undergraduate students: Sarah Benjamin (Astronomy grad. student at Yale)
<u>May 2009-Sept 2009</u> Joshua Tepper
<u>January 2007-May 2007</u> Physics Undergraduate students: Nic Volet (Grad Student, Switzerland), Brian Newman (Astronomy Grad at Cornell)
<u>January 2006-May 2006</u> Physics Undergraduate students: Hayley Finley (Astronomy grad Student, Paris), Gregory Peim, Li Yang, Dan Carmody

• <u>Postdoctoral research associates</u>

<u>Sept 2015-2016</u> Dr Francois Lanusse (partial support) <u>Sept 2014-2015</u> Dr Simeon Bird (McWilliams' Fellow) <u>Sept 2012-2014</u> Dr Kwang-Ho Park, Urania-Stott Fellow <u>Sept. 2009–Sept 2012</u> Dr. Nishikhanta Khandai (Postdoc at Brookhaven National Laboratory with A. Slozar) <u>Oct 2005–Oct 2007</u> Dr. Inti Pelupessi (Research Staff, Leiden University), Dr. Joerg Colberg (half sponsored, now UMass University)