Elisa V. Quintana | CV

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Research Interests

My research is focused on the detection, characterization, and formation of extrasolar planets. I use transit photometry to search for planets, and radial velocity and adaptive optics data to confirm planets. I specialize in creating numerical models to explore the formation and habitability of Earth-like planets in environments that are extreme yet prevalent, such as around M-dwarfs and in binary star systems.

Employment

- **Astrophysicist**
  Goddard Space Flight Center — *Jan 2017–Present*
- **NASA Postdoctoral Program Senior Fellow**
  Ames Research Center — *Apr 2014–Jan 2017*
- **Research Scientist**
  SETI Institute, Kepler Participating Scientist Program — *Oct 2011–Mar 2014*
- **Kepler Mission Scientific Programmer**
  SETI Institute — *Dec 2006–Sep 2011*
- **NASA Postdoctoral Program**
  Ames Research Center — *Jul 2004–Jul 2006*
- **NASA Graduate Student Research Program Fellow**
  Ames Research Center — *Jul 1999–Jul 2004*
- **NASA GEM Fellow**
  Goddard Space Flight Center — *May 1998–Aug 1998*
- **NASA Academy Research Associate**
  Goddard Space Flight Center — *May 1997–Aug 1997*

Education

- **University of Michigan, Ann Arbor**
  Ph.D. Physics — *2004*
- **University of Michigan, Ann Arbor**
  M.S. Physics & M.S. Aerospace Science — *2002*
- **University of California, San Diego**
  B.S., Physics with honors — *1999*

Select Awards

- **HENAAC 2015 Scientist of the Year**
  Great Minds in Stem — *2015*
  To recognize the achievements of America's top engineers and scientists within the Hispanic community
- **The 2014 Lupe Ontiveros Dream Award**
  Los Angeles Theatre Center — *2014*
  To recognize women with trailblazing careers who have made contributions to the Latino community

- **NASA Software of the Year Award**
  Kepler Mission Science Operations Center software system *2010*
- **Michigan Center for Theoretical Physics Fellowship**
  University of Michigan *2002–2003*
- **NASA GEM Doctoral Science Fellowship**
  Goddard Space Flight Center *1997–1998*
- **California Space Grant Consortium Scholarship**
  University of California, San Diego *1995–1997*

Select Publications

- **Quintana, E. V., Barclay, T., Borucki, W. J., et al.**
  The Frequency of Giant Impacts on Earth-like Worlds *2016*
  ApJ 821, 126
- **Barclay, T., Quintana, E. V., Adams, F. C., et al.**
  The Five Planets in the Kepler-296 Binary System All Orbit the Primary *2015*
  ApJ 209, 7
- **Quintana, E. V., Barclay, T., Raymond, S. N., et al.**
  An Earth-Sized Planet in the Habitable Zone of a Cool Star *2014*
  Science 344, 277
- **Quintana, E. V. and Lissauer, J. J.**
  The Effect of Planets Beyond the Ice Line on the Accretion of Volatiles by Habitable-zone Rocky Planets *2014*
  ApJ 786, 33
- **Quintana, E. V., Rowe, J. F., Barclay, T., et al.**
  Confirmation of Hot Jupiter Kepler-41b via Phase Curve Analysis *2013*
  ApJ 767, 137
- **Quintana, E. V., Jenkins, J. M. and Clarke, B. D., et al.**
  Pixel-level Calibration in the Kepler Science Operations Center Pipeline *2010*
  SPIE 7740, 77401X
- **Quintana, E. V. and Lissauer, J. J.**
  Terrestrial Planet Formation in Binary Star Systems *2010*
  Chapter in Planets in Binary Star Systems, ed. Haghighipour (New York: Springer), 265
- **Quintana, E. V., Adams, F. C., Lissauer, J. J., and Chambers, J. E.**
  Terrestrial Planet Formation around Individual Stars within Binary Star Systems *2007*
  ApJ 660, 807
- **Quintana, E. V. and Lissauer, J. J.**
  Terrestrial Planet Formation Surrounding Close Binary Stars *2006*
  Icarus 185, 1
- **David, E.-M., Quintana, E. V., Fatuzzo, M., and Adams, F. C.**
  Stability of Earth-like Planetary Orbits in Binary Systems *2003*
  PASP 115, 809
- **Quintana, E. V., Lissauer, J. J. and Chambers, J. E.**
  Terrestrial Planet Formation in the Alpha Centauri System *2002*
  ApJ 576, 982
- **Chambers, J. E., Quintana, E. V., Duncan, M. J. and Lissauer, J. J.**
  Symplectic Integrator Algorithms for Modeling Planetary Accretion in Binary Star Systems *2002*
  ApJ 123, 2884

Public Outreach

- **Society for Advancement of Chicanos and Native Americans in Science Conference**
  Invited Panelist and Talk on A Sweep of the Universe — *Oct 2016*
- **Star Trek: Mission New York**
  Panelist for Trek Talks on the TESS Mission; Staffed NASA booth — *Sept 2016*
- **AltSpaceVR Virtual Reality Storytelling Series**
  Invited Talk in VR on Strange New Worlds — *June 2016*
- **Kennedy Space Center**
  Invited Talk for Hispanic Outreach and Leadership Alliance — *Feb 2016*
- **Conference for Undergraduate Women in Physics**
  Invited Panelist for Women in STEM Topics — *Jan 2016*
- **Oracle Open World**
  Invited Talk for VIP Breakout Session on Cloud Computing — *Oct 2015*
- **San Francisco Amateur Astronomers Club**
  Invited Talk: Searching for Alien Worlds — *Sept 2015*
- **Instituto de Astronomia, UNAM at Ensenada, Mexico**
  Lecturer at 3rd Mexican School on Astrobiology — *Sept 2015*
- **Charlottesville Astronomical Society**
  Invited Talk: Searching for Planets with Kepler — *Mar 2015*
- **Hispanas Organized for Political Equality Conference**
  Keynote Speaker for Latina History Day — *Jan 2015*
- **University of Naples, Italy**
  Invited Talk: Searching for Other Earth-like Worlds — *Dec 2014*
- **Oracle Open World Conference**
  Invited Talk for VIP Breakout Session on Big Data Science — *Oct 2014*

Professional Service

- **Journal Article Reviewer**
  Refereed many articles in various astronomy/planetary science journals — *2004-present*
- **NASA Scientific Proposals Reviewer**
  Served on panel for a NASA proposal review — *Jun 2015*

Select Media Coverage

- **NASA Press Release**
  Kepler-186f (Quintana et al. 2014) named #1 in "Top 20 Intriguing Exoplanets" List — *Oct 2015*
- **Telemundo 48**
  Television interview on my career — *Oct 2015*
- **NPR Science Friday**
  Public Radio: Spotting Earth's Cousin in the Cosmos — *Apr 2014*
- **NPR All Things Considered**
  Public Radio: Scientists Spot A Planet That Looks Like 'Earth's Cousin' — *Apr 2014*
- **New York Times article on my work**
  Scientists Find an 'Earth Twin,' or Perhaps a Cousin — *Apr 2014*
- **Los Angeles Times article on my work**
  Earth-Sized Planet Found Orbiting in a Habitable Zone — *Apr 2014*