

Tom Oriyan Zick

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EDUCATION *PhD. in Astrophysics (Expected)* May 2020
University of California at Berkeley, Berkeley, CA

B.Sc, Summa Cum Laude, in Physics w/ Specialization in Astrophysics June 2014
University of California at San Diego, La Jolla, CA

**HONORS
FELLOWSHIPS
AND AWARDS** *Livermore Graduate Scholar* Aug 2016 - Aug 2018
Phi Beta Kappa Honor Society Member Spring 2014

Physical Science Dean's Award for Undergraduate Excellence Spring 2014

Clarendon Fellowship (Declined) Spring 2014

DOE NNSA Stewardship Science Graduate Fellowship (Declined) Spring 2014

National Undergraduate Fellowship Summer 2013

Klara Eckart Scholar Sep 2012 - June 2014

Malcom R. Stacey Scholar Aug 2012 - June 2014

Eleanor Roosevelt College Showcase Research Paper Spring 2012

Eleanor Roosevelt College Provost Honors Sep 2010 - June 2014

- PUBLICATIONS**
1. "Globular Clusters in High-Redshift Dwarf Galaxies: A Case Study from the Local Group" **T.O. Zick**, D.R. Weisz, M. Boylan-Kolchin; (Submitted to MNRAS)
 2. "The MOSDEF survey: Multiple Paths to Quenching at $z \sim 2$ " **T. O. Zick**, M. Kriek, A.E. Shapley +11 authors; (In prep, to be submitted to ApJ letters)
 3. "The MOSDEF survey: a stellar mass-SFR-metallicity relation exists at $z \sim 2.3$ " R. L. Sanders, A.E. Shapley, M. Kriek +11 authors including **T. Zick**; (Submitted to ApJ)
 4. "The MOSDEF Survey: Direct Observational Constraints on the Ionizing Photon Production Efficiency, ξ_{ion} , at $z \sim 2$ " I. Shivaeei, N.A. Reddy, B. Siana +11 authors including **T. Zick**; (Submitted to ApJ)
 5. "The MOSDEF Survey: Metallicity Dependence of PAH Emission at High Redshift and Implications for 24 μm Inferred IR Luminosities and Star Formation Rates at $z \sim 2$ " I. Shivaeei, N. A. Reddy, A. E. Shapley +11 authors including **T. Zick**; ApJ 80, 819 (2016); ApJ 837, 157 (2017)

6. “The MOSDEF Survey: Dynamical and Baryonic Masses and Kinematic Structures of Star-forming Galaxies at $1.4 < z < 2.6$ ” S.H. Price, M. Kriek, A.E Shapley +11 authors including **T. Zick**; ApJ 80, 819 (2016).
7. “Counter propagating plasma jet interaction and shock formation for laboratory astrophysical phenomena on a small scale current driver” J.C. Valenzuela, G.W. Collins IV, **T. Zick**, J. Narkis, I. Krasheninnikov, F.N. Beg; High Energy Density Physics, 10.1016 (2015).
8. “Investigation into the dynamics of laser-cut foil X-pinchs and their potential use for high repetition rate operation” G. W. Collins IV, M. P. Valdivia, **T. O. Zick**, J. Kim, D. M. Haas, A. C. Forsman, R. B. Stephens, and F. N. Beg Applied Physics Letters 105, 024101 (2014).
9. “Study of X-pinch dynamics using a low current (25 kA) and slower current (400 ns) pulse” G. W. Collins IV, M. P. Valdivia, **T. Zick**, R. E. Madden, M. G. Haines, and F. N. Beg, Physics of Plasmas 20, 042704 (2013).

OUTREACH

UCB Virtual Reality Astronomy Education Initiative 2017-present
 Lead a successful crowdfunding campaign to create virtual reality outreach demos. Collaborate with faculty members and World Wide Telescope developers to generate educational and outreach content.

Astronomy Night Lecture Series 2016-present
 Worked with two other graduate students to initiate a monthly lecture series followed by stargazing on our 17” outreach telescope.

Splash! @ Berkeley 2014-present
 Teach hour long classes in advanced physics topics to high school students at an accessible level once a semester.