

## List of Publications from Unistellar/SETI Institute scientific activity

\* – includes citizen scientists

### Peer-reviewed Articles

\*Graykowski, A. et al., Characterizing the Effects of the DART Impact on Dimorphos with the Unistellar Network, submitted for publication, 2022

\*Yoshida, F. et al, Multi-chord observation of stellar occultation by the near-Earth asteroid (3200) Phaethon on October 3, 2021 (UTC) with very high accuracy, accepted for Publication of the Astronomical Society of Japan, 2022

\*Lambert, R. et al, Rotation Period Determination for (7335) 1989JA, accepted for publications in Minor Planet Bulletin, 2022

\*Peluso, D. O., et al, The Unistellar Exoplanet Campaign: Citizen Science Results and Inherent Education Opportunities, submitted to Astronomical Journal, 2022

\*Perrocheau, A. et al., A 16 Hour Transit of Kepler-167 e Observed by the Ground-based Unistellar Telescope Network, accepted for publication in Astrophysical Journal Letter, 2022

Cazeneuve, D., et al., ODNET, accepted for publication in Astrophysical Journal, 2022

\*Sibbernsen, K. 2022. Electronic telescopes and their use in astronomy education. *The Physics Teacher*, 60(5), 394. <https://doi.org/10.1119/10.0010401>

\*Barbosa, D., Coelho, B., Bergano, M., Magalhães, C., Mendonça, D., Silva, D., Correia, A.C. ~M., Pandeirada, J., Ribeiro, V., Esposito, T., Marchis, F., 2022. Cyber-Cosmos: A new citizen science concept in a dark sky destination. *Acta Astronaut.* 200, 612–619. <https://doi.org/10.1016/j.actaastro.2022.09.008>

\*Pearson, K.A., Beichman, C., Fulton, B.J., Esposito, T.M., Zellem, R.T., Ciardi, D.R., Rolfness, J., Engelke, J., Fatahi, T., Zimmerman-Brachman, R., Avsar, A., Bhalerao Varun, D., Boyce, P., Bretton, M., Burnett, A.D., Burt, J., Fowler, M., Gallego, D., Gomez, E., Guillet, B., Hilburn, J., Jongen, Y., Kataria, T., Kokori, A., Kumar, H., Kuossari, P., Lekkas, G., Marchini, A., Meneghelli, N., Ngeow, C.-C., Primm, M., Samantaray, S., Shimizu, M., Silvis, G., Sienkiewicz, F., Swain, V., Tan, J., Tock, K., Wagner, K., Wünsche, A., 2022. Utilizing a global network of telescopes to update the ephemeris for the highly eccentric planet HD 80606 b and to ensure the efficient scheduling of JWST. arXiv e-prints arXiv:2208.14520.

\*Wang, X.-Y., Rice, M., Wang, S., Pu, B., Stefánsson, G., Mahadevan, S., Radzom, B., Giacalone, S., Wu, Z.-Y., Esposito, T.M., Dalba, P.A., Avsar, A., Holden, B., Skiff, B., Polakis, T., Voeller, K., Logsdon, S.E., Klusmeyer, J., Schweiker, H., Wu, D.-H., Beard, C., Dai, F., Lubin, J., Weiss, L.M., Bender, C.F., Blake, C.H., Dressing, C.D., Halverson, S., Hearty, F.,

Howard, A.W., Huber, D., Isaacson, H., Jackman, J.A., ~G., Llama, J., McElwain, M.W., Rajagopal, J., Roy, A., Robertson, P., Schwab, C., Shkolnik, E.L., Wright, J.T., Laughlin, G., 2022. The Aligned Orbit of WASP-148b, the Only Known Hot Jupiter with a nearby Warm Jupiter Companion, from NEID and HIRES. *\apjl* 926, L8.

<https://doi.org/10.3847/2041-8213/ac4f44>

Dalba, P.A., Kane, S.R., Dragomir, D., Villanueva, S., Collins, K.A., Jacobs, T.L., LaCourse, D.M., Gagliano, R., Kristiansen, M.H., Omohundro, M., Schwengeler, H.M., Terentev, I.A., Vanderburg, A., Fulton, B., Isaacson, H., Van Zandt, J., Howard, A.W., Thorngren, D.P., Howell, S.B., Batalha, N.M., Chontos, A., Crossfield, I.J., ~M., Dressing, C.D., Huber, D., Petigura, E.A., Robertson, P., Roy, A., Weiss, L.M., Behmard, A., Beard, C., Brinkman, C.L., Giacalone, S., Hill, M.L., Lubin, J., Mayo, A.W., Močnik, T., Akana Murphy, J.M., Polanski, A.S., Rice, M., Rosenthal, L.J., Rubenzahl, R.A., Scarsdale, N., Turtelboom, E. V, Tyler, D., Benni, P., Boyce, P., Esposito, T.M., Girardin, E., Laloum, D., Lewin, P., Mann, C.R., Marchis, F., Schwarz, R.P., Srdoc, G., Steuer, J., Sivarani, T., Unni, A., Eisner, N.L., Fetherolf, T., Li, Z., Yao, X., Pepper, J., Ricker, G.R., Vanderspek, R., Latham, D.W., Seager, S., Winn, J.N., Jenkins, J.M., Burke, C.J., Eastman, J.D., Lund, M.B., Rodriguez, D.R., Rowden, P., Ting, E.B., Villaseñor, J.N., 2022. The TESS-Keck Survey. VIII. Confirmation of a Transiting Giant Planet on an Eccentric 261 Day Orbit with the Automated Planet Finder Telescope. *\aj* 163, 61. <https://doi.org/10.3847/1538-3881/ac415b>

Marchis, F., Malvache, A., Marfisi, L., Borot, A., Arbouch, E., 2020. Unistellar eVscopes: Smart, portable, and easy-to-use telescopes for exploration, interactive learning, and citizen astronomy. *Acta Astronaut.* 166, 23–28.

<https://doi.org/10.1016/j.ACTAASTRO.2019.09.028>

Zellem, R.T., Pearson, K.A., Blaser, E., Fowler, M., Ciardi, D.R., Biferno, A., Massey, B., Marchis, F., Baer, R., Ball, C., Chasin, M., Conley, M., Dixon, S., Fletcher, E., Hernandez, S., Nair, S., Perian, Q., Sienkiewicz, F., Tock, K., Vijayakumar, V., Swain, M.R., Roudier, G.M., Bryden, G., Conti, D.M., Hill, D.H., Hergenrother, C.W., Dussault, M., Kane, S.R., Fitzgerald, M., Boyce, P., Peticolas, L., Gee, W., Cominsky, L., Zimmerman-Brachman, R., Smith, D., Creech-Eakman, M.J., Engelke, J., Iturralde, A., Dragomir, D., Jovanovic, N., Lawton, B., Arbouch, E., Kuchner, M., Malvache, A., 2020. Utilizing Small Telescopes Operated by Citizen Scientists for Transiting Exoplanet Follow-up. *Publ. Astron. Soc. Pacific* 132, 054401. <https://doi.org/10.1088/1538-3873/ab7ee7>

## Conference Proceedings

Marchis, F., Esposito, T., Lambert, R., Dalba, P., 2022. New Astronomy with the Unistellar Network, in: *IAC 2022 Congress Proceedings, 73rd International Astronautical Congress (IAC)*, Paris, France.

\*Lambert, R., ~A., Marchis, F., Asencio, J., Blaclard, G., Sgro, L., ~A., Giorgini, J., ~D., Plavchan, P., White, T., Verveen, A., Goto, T., Kuossari, P., Sethu, N., Loose, M., ~A., Will, S., Sibbersen, K., Pickering, J., ~W., Randolph, J., Fukui, K., Huet, P., Guillet, B., Clerget, O., Stahl, S., Yoblonsky, N., Lauvernier, M., Matsumura, T., Yamato, M., Laugier, J.-M., Brodt-

Vilain, O., Espudo, A., Kukita, R., Iida, S., Kardel, S., Green, D., Tikkanen, P., Douvas, A., Billiani, M., Knight, G., Ryno, M., Simard, G., Knight, R., Primm, M., Wildhagen, B., Poncet, J., Frachon, T., Shimizu, M., Jackson, A., Parker, B., Redfern, G., Nikiforov, P., Friday, E., Lincoln, K., Sweitzer, J., Mitsuoka, R., Cabral, K., Katterfeld, A., Fairfax, M., 2022. Citizen science astronomy with a network of small telescopes: the launch and deployment of JWST, in: Marshall, H.K., Spyromilio, J., Usuda, T. (Eds.), *Ground-Based and Airborne Telescopes IX*, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series. p. 121822Z. <https://doi.org/10.1117/12.2628678>

Marchis, F., Esposito, T., Peluso, D., Blaclard, G., Asencio, J., Megowan-Romanowicz, C., Pennypacker, C., Carter, B., 2021. Outreach and scientific Results With The Largest Network of Backyard Astronomers — IAF Digital Library, in: *IAC 2021 Congress Proceedings, 72nd International Astronautical Congress (IAC)*, Dubai, United Arab Emirates.

Barbosa, D., Coelho, B., Bergano, M., Magalhães, C., Mendonça, D., Silva, D., Correia, A., Pandeirada, J., Ribeiro, V., Esposito, T., Marchis, F., 2021. Cyber-Cosmos: a new Citizen science concept in a Dark Sky Destination — IAF Digital Library, in: *IAC 2021 Congress Proceedings, 72nd International Astronautical Congress (IAC)*, Dubai, United Arab Emirates.

## Conference Abstracts

\*Bruno Guillet, Tom Esposito, Arin Avsar, Franck Marchis, Daniel Peluso, and 130 citizen astronomers, 2022. Détections d'exoplanètes par des astronomes amateurs du réseau Unistellar, Posters aux journées 2022 de la SF2A, Besançon (France) Juin 2022

\*Bruno Guillet, Franck Marchis, Joé Asencio, Ryan Lambert, Paul Dalba, Guillaume Blaclard, and several citizen astronomers, 2022. Détections d'astéroïdes et d'engins spatiaux par des astronomes amateurs du réseau Unistellar, Posters aux journées 2022 de la SF2A, Besançon (France) Juin 2022

Esposito, T., Avsar, A., Marchis, F., Dalba, P., Peluso, D., 2022. Hot and Cold Jupiters: Exoplanet Transit Results from the Unistellar Citizen Scientist Network, in: *American Astronomical Society Meeting Abstracts*, American Astronomical Society Meeting Abstracts. p. 339.07.

Hanus, J., Marchis, F., Asencio, J., Durech, J., 2021. Lightcurve observations of near-Earth asteroids with the Unistellar's network of citizen astronomers, in: *AGU Fall Meeting Abstracts*. pp. SY55C-0361.

Marchis, F., Esposito, T., Asencio, J., Klavans, V., Blaclard, G., Peluso, D.O., Megowan-Romanowicz, C., Pennypacker, C., 2021. Citizen Science and Scientific Results from the Worlds Largest Network of Backyard Astronomers, in: *AGU Fall Meeting Abstracts*. pp. SY55A-04.

Hanus, J., Durech, J., Marchis, F., Asencio, J., Blaclard, G., 2021. Physical Properties of Near-Earth Asteroids, in: AGU Fall Meeting Abstracts. pp. P33A-02.

Cazeneuve, D., Marchis, F., Blaclard, G., Asencio, J., Martin, V., 2021. Detection of Occultation Events by Machine Learning for the Unistellar Network, in: AGU Fall Meeting Abstracts. pp. P11B-12.

Marchis, F., Asencio, J., Peluso, D., Durech, J., Vereš, P., Blaclard, G., Demuys, I., Nachury, L., 2021. The Contribution of the Unistellar Network for Planetary Defense: Empowering Crowd-sourcing Astronomy, in: 7th IAA Planetary Defense Conference. p. 271.

Dunham, D., Dunham, J., Buie, M., Preston, S., Herald, D., Farnocchia, D., Giorgini, J., Arai, T., Sato, I., Nolthenius, R., Irwin, J., Degenhardt, S., Marshall, S., Moore, J., Whitehurst, S., Venable, R., Skrutskie, M., Marchis, F., Ye, Q., Tanga, P., Aissa, D.B., Grigahcene, Z., 2021. Accurate NEO Orbits from Occultation Observations, in: 7th IAA Planetary Defense Conference. p. 37.

Esposito, T. M., Avsar, A., Peluso, D., Marchis, F., Santana, P., Klavans, V., Nachury, L., 2021.

TESS Planet Candidate Follow-up by Citizen Scientists in the Global Unistellar eVscope Network, in: Posters from the TESS Science Conference II (TSC2), held virtually, id.155. <https://doi.org/10.5281/zenodo.5131297>.

Marchis, F., Peluso, D., Esposito, T., Megowan-Romanowicz, C., Pennypacker, C., Unistellar Science Team, 2021. A Large Citizen Science Astronomy Network for All of Us, in: American Astronomical Society Meeting Abstracts, American Astronomical Society Meeting Abstracts. p. 412.06.

Esposito, T. M., Marchis, F., Peluso, D., Avsar, A., Zellem, R., ~T., 2021. Transiting Exoplanet Followup by Citizen Scientists with the Global Unistellar eVscope Network, in: American Astronomical Society Meeting Abstracts, American Astronomical Society Meeting Abstracts. p. 239.03.

Asencio, J., Marchis, F., Esposito, T., Veres, P., 2020. Planetary Defense With a Network of Compact, Smart and Low-Cost Digital Telescopes, in: AGU Fall Meeting Abstracts. pp. NH037-0008.

Marchis, F., Esposito, T., Asencio, J., Demuys, I., Peluso, D., Veres, P., Zellem, R., Nachury, L., 2020. Enabling and Empowering Citizen Science in Astronomy With a Network of Small Digital & Smart Telescopes, in: AGU Fall Meeting Abstracts. pp. ED025-06.

Marchis, F., Esposito, T., Asencio, J., Demuys, I., Peluso, D., Veres, P., Zellem, R., Hanus, J., Nachury, L., 2020. First Results With a Network of Small Digital & Smart Telescopes: Citizen Science For Astronomy, in: AAS/Division for Planetary Sciences Meeting Abstracts, AAS/Division for Planetary Sciences Meeting Abstracts. p. 413.02.

Marchis, F., Esposito, T., Malvache, A., Peluso, D., Vereš, P., Hanuš, J., 2020. Unistellar: The largest citizen science astronomy network for all of us — IAF Digital Library, in: IAC 2020 Congress Proceedings, 71st International Astronautical Congress (IAC) — IAC CyberSpace Edition , 12–14 October 2020.

Marchis, F., Arbouch, E., Peluso, D., Harman, P. ~K., Malvache, A., Bertin, E., Zellem, R., Veres, P., 2019. Citizen Science Astronomy with the Unistellar Network: From Planetary Defense to Exoplanet Transits, in: AGU Fall Meeting Abstracts. pp. ED14A-03.

Marchis, F., Arbouch, E., Bertin, E., Malvache, A., Vereš, P., Zellem, R.T., 2019. Citizen Science Astronomy with the Unistellar Network: From Planetary Defense to Exoplanet Transits, in: EPSC-DPS Joint Meeting 2019. p. EPSC-DPS2019-898.