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IDENTIFYING INFORMATION:

NAME: Hanson, Jordan

ORCID: 0000-0003-4055-4553

POSITION TITLE: Assistant Professor of Physics

ORGANIZATION AND LOCATION: Whittier College, Whittier, CA, United States of America

Professional Preparation:

ORGANIZATION AND LOCATION	DEGREE (if applicable)	DATE RECEIVED	FIELD OF STUDY
Center for Cosmology and Astro-Particle Physics (CCAPP) at The Ohio State University, Columbus, OH, United States of America	Postdoctoral Fellow	2015 - 2017	Physics
The University of Kansas, Lawrence, KS, United States of America	Postdoctoral Fellow	2013 - 2015	Physics
University of California at Irvine, Irvine, CA, United States of America	PHD	03/2013	Physics
Yale University, New Haven, CT, United States of America	BS	05/2007	Physics

Appointments and Positions

2017 - present Assistant Professor of Physics, Whittier College, Whittier, CA, United States of America

2022 - 2022 Summer Faculty Research Fellow, Office of Naval Research, Corona, CA, United States of America

2021 - 2021 Summer Faculty Research Fellow, Office of Naval Research, Corona, CA, United States of America

2020 - 2020 Summer Faculty Research Fellow, Office of Naval Research, Corona, CA, United States of America

Products

Products Most Closely Related to the Proposed Project

1. Hanson, J. et al. Time-domain response of the ARIANNA detector. Astroparticle Physics. 2015 March; 62:139-151. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0927650514001315 DOI: 10.1016/j.astropartphys.2014.09.002
2. Hanson J, Connolly A. Complex analysis of Askaryan radiation: A fully analytic treatment including the LPM effect and Cascade Form Factor. Astroparticle Physics. 2017 May; 91:75-89. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0927650517301068 DOI:

10.1016/j.astropartphys.2017.03.008

3. Hanson J, Hartig R. Complex analysis of Askaryan radiation: A fully analytic model in the time domain. Physical Review D. 2022; 105(12):-. Available from: https://link.aps.org/doi/10.1103/PhysRevD.105.123019 DOI: 10.1103/PhysRevD.105.123019
4. Hanson J, Barwick S, Berg E, Besson D, Duffin T, Klein S, Kleinfelder S, Reed C, Roumi M, Stezelberger T, Tatar J, Walker J, Zou L. Radar absorption, basal reflection, thickness and polarization measurements from the Ross Ice Shelf, Antarctica. Journal of Glaciology. 2017 July 10; 61(227):438-446. Available from: https://www.cambridge.org/core/product/identifier/S0022143000203948/type/journal_article DOI: 10.3189/2015JoG14J214
5. Hanson J. Broadband RF Phased Array Design with MEEP: Comparisons to Array Theory in Two and Three Dimensions. Electronics. 2021 February 08; 10(4):415-. Available from: https://www.mdpi.com/2079-9292/10/4/415 DOI: 10.3390/electronics10040415

Other Significant Products, Whether or Not Related to the Proposed Project

1. Barwick S, Berg E, Besson D, Gaswint G, Glaser C, Hallgren A, Hanson J, Klein S, Kleinfelder S, Köpke L, Kravchenko I, Lahmann R, Latif U, Nam J, Nelles A, Persichilli C, Sandstrom P, Tatar J, Unger E. Observation of classically `forbidden' electromagnetic wave propagation and implications for neutrino detection. Journal of Cosmology and Astroparticle Physics. 2018 July 24; 2018(07):055-055. Available from: https://iopscience.iop.org/article/10.1088/1475-7516/2018/07/055 DOI: 10.1088/1475-7516/2018/07/055
2. Anker A, Barwick S, Bernhoff H, Besson D, Bingefors N, García-Fernández D, Gaswint G, Glaser C, Hallgren A, Hanson J, Klein S, Kleinfelder S, Lahmann R, Latif U, Nam J, Novikov A, Nelles A, Paul M, Persichilli C, Plaisier I, Prakash T, Shively S, Tatar J, Unger E, Wang S, Welling C. A search for cosmogenic neutrinos with the ARIANNA test bed using 4.5 years of data. Journal of Cosmology and Astroparticle Physics. 2020 March 25; 2020(03):053-053. Available from: https://iopscience.iop.org/article/10.1088/1475-7516/2020/03/053 DOI: 10.1088/1475-7516/2020/03/053
3. Barwick S, Berg E, Besson D, Duffin T, Hanson J, Klein S, Kleinfelder S, Ratzlaff K, Reed C, Roumi M, Stezelberger T, Tatar J, Walker J, Young R, Zou L. Design and Performance of the ARIANNA HRA-3 Neutrino Detector Systems. IEEE Transactions on Nuclear Science. 2015 October; 62(5):2202-2215. Available from: http://ieeexplore.ieee.org/document/7283676/ DOI: 10.1109/TNS.2015.2468182
4. Glaser C, García-Fernández D, Nelles A, Alvarez-Muñiz J, Barwick S, Besson D, Clark B, Connolly A, Deaconu C, de Vries K, Hanson J, Hokanson-Fasig B, Lahmann R, Latif U, Kleinfelder S, Persichilli C, Pan Y, Pfendner C, Plaisier I, Seckel D, Torres J, Toscano S, van Eijndhoven N, Vieregg A, Welling C, Winchen T, Wissel S. NuRadioMC: simulating the radio emission of neutrinos from interaction to detector. The European Physical Journal C. 2020 January 31; 80(2):-. Available from: http://link.springer.com/10.1140/epjc/s10052-020-7612-8 DOI: 10.1140/epjc/s10052-020-7612-8
5. Hanson J. Broadband RF Phased Array Design for UHE neutrino detection. Proceedings of 37th International Cosmic Ray Conference — PoS(ICRC2021). 37th International Cosmic Ray

Conference; 12-2 ly; Berlin, Germany - Online. Trieste, Italy: Sissa Medialab; c2021. Available from: https://pos.sissa.it/395/1217 DOI: 10.22323/1.395.1217

Synergistic Activities

1. Coordinator for the ARTEMIS Program, a program through the Whittier College Center for Engagement with Communities (CEC) designed to provide access to research opportunities for young women from local high schools (2019 and 2020).
2. Coordinator of Science Night summer lectures at Los Nietos Middle School, to share research results and a broader understanding of physics and astrophysics with the community (2019).
3. Sponsor of Ondrasik-Groce Fellowship, a fellowship awarded to outstanding STEM researchers at Whittier College. Mentored talented young people to advance their professional trajectories in science and engineering (2019-2020, and 2021-2022).
4. Invited speaker to the inaugural MeepCon (2022) Conference, held at MIT in Summer 2022. Invited to share and disseminate ground-breaking results in the field of computational electromagnetism (CEM), leading to cross-disciplinary progress in applied physics.
5. Created online courses for military personnel through the Office of Naval Research (ONR). Delivered online remote learning content in the areas of RF Field Engineering, and Modern GPS Signals.

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

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