

## CURRICULUM VITAE: KYLE GWIRTZ

Ph.D. Candidate  
Geophysics,  
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### EDUCATION

|                                     |                     |       |             |
|-------------------------------------|---------------------|-------|-------------|
| Scripps Institution of Oceanography | Geophysics          | Ph.D. | In Progress |
| University of Arizona               | Applied Mathematics | M.S.  | 2019        |
| University of Kansas                | Mathematics         | B.Sc. | 2009        |

### AWARDS

NASA Earth and Space Science Fellowship (NESSF) 2018-2021

### PUBLICATIONS

K. Gwirtz, M. Morzfeld, A. Fournier, G. Hulot, *Can one use Earth's magnetic axial dipole field intensity to predict reversals?*, (In review).

M. Brio, J.G. Caputo, K. Gwirtz, J. Liu and A. Maimistov, *Scattering of a short electromagnetic pulse from a Lorentz-Duffing film: theoretical and numerical analysis*, Wave Motion, 89, 43-56 (2019).

### RESEARCH EXPERIENCE

Graduate Intern, NASA Goddard Space Flight Center Summer 2018

### TALKS & PRESENTATIONS

Siam-Mathematics of Planet Earth Summer 2020

Title of Talk: Data assimilation experiments with a reduced-order model of the geodynamo

Scripps Institution of Oceanography, Paleomagnetism Seminar Summer 2020

Title of Talk: Can one use Earth's magnetic axial dipole field intensity to predict reversals?

International Union of Geodesy and Geophysics General Assembly Summer 2019

Title of Poster: Geomagnetic data assimilation: numerical experiments with a reduced-scale model

American Geophysical Union Fall 2018 Meeting Fall 2018

Title of Poster: Localization and bias correction in geomagnetic data assimilation: systematic numerical experiments with reduced-scale models

U2 can UQ, University of Arizona Spring 2018

Title of Talk: Geomagnetic data assimilation

RTG workshop, University of Arizona Fall 2017

Title of Talk: Invariant densities for maps with noise

RTG workshop, University of Arizona Spring 2017

Title of Talk: Thin ferroelectric films

### RECENT TEACHING

Graduate Teaching Assistant, Department of Mathematics, University of Arizona

| Semester    | Course   |
|-------------|--|
| Spring 2018 | Math 120: Precalculus                                  |
| Fall 2017   | Math 263: Introduction to Statistics and Biostatistics |
| Spring 2017 | Math 112: College Algebra                              |
| Fall 2016   | Math 112: College Algebra                              |