Current and Pending Support, David C. Collins

As of May 2, 2022

Current Funding

Project Title: CMB Polarization Foreground Effects on B-modes and Lensing

Project PI: K. Huffenberger

Program Name: NSF AAG 2009870

Period of Performance: 08/01/2020 - 07/31/2023

Amount \$533,714 FTE: 1 Month/Year

Summary of Work: This work will develop analytic and numerical models of the microwave ISM. We will use these tools to understand the contamination by the local ISM to lensing

and CMB observations.

Pending

Project Title: Synchrotron Depolarization: Unravelling The Radio Sky

Project PI: A. Kogut

Program Name: NASA ADAP

Period of Performance: 01/01/2024 - 12/31/26

Amount \$278,085 FTE: 1 Month/Year

Summary of Work: We will perform simulations of the ISM to study depolarization of

synchrotron radiation and the synchrotron dipole radiation in the galaxy.

Project Title: Collaborative research: Galactic and circumgalactic magnetic fields in Milky

Way-like galaxies.

Project PI: B. O'Shea

Program Name: NSF AAG

Period of Performance: 08/02/2028 - 7/31/27

Amount \$300,907 FTE: 1 Month/Year

Summary of Work: We will perform simulations of galaxy formation and evolution to

model the growth of the magnetic field.