Current and Pending Support, David C. Collins

As of May 2, 2022

Current Funding

Project Title: Magnetic Fields in the Formation of Molecular Clouds, Filaments, and Cores
Project PI: D. C. Collins
Program Name and award number: NSF AAG AST-1616026
Period of Performance: 09/01/2016 - 08/31/2022
Amout $298,492
FTE: 1.0 Month/year
Summary of Work: This project is studying the gravitational collapse of molecular clouds using simulations of magnetohydrodynamical turbulence.

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: Collaborative research: Galactic and circumgalactic magnetic fieldsin Milky Way-like galaxies.
Project PI: B. O'Shea
Program Name: NSF AAG
Period of Performance: 08/02/2022 - 7/31/25
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.

Project Title: Synchrotron Depolarization: Unravelling The Radio Sky
Project PI: A. Kogut
Program Name: NASA ADAP
Period of Performance: 02/01/2023 - 1/31/26
Amount $253,239
FTE: 1 Month/Year
Summary of Work: We will perform simulations of the ISM to study depolarizaton of synchrotron radiation and the synchrotron dipole radiation in the galaxy.