

FY 2018 NASA/NC Space Grant Graduate Research Fellows

Bryce Aberg, North Carolina State University

Optimization of Busbar and Thermal Management System Design for High Power Inverters

Ashley Ciero, The University of North Carolina at Charlotte

Design and Development of a Digital Diagnostic System for Unsteady Magneto Hydrodynamic Flow Analysis

Patrick Gray, Duke University

Detecting Marine Mammals from Orbit Through Multispectral Satellite Imagery and Oceanographic Remote Sensing Products

Ian Krintz, Appalachian State University

Assessing Satellite-Based Aerosol Optical Depth Retrievals and Sub-Pixel Variability Over Mountainous Regions

Eric Land, North Carolina State University

Transcriptional Regulation of Plant Adaptations to Microgravity

Nicholas Mazzoleni, North Carolina State University

Experimental Investigation of Combined Power Output of Solar-Wind Hybrid Energy Harvesters for Mars Exploration

Kellyn Montgomery, North Carolina State University

Crop stress detection using remote sensing from unmanned aircraft systems

Christopher Munna, The University of North Carolina at Chapel Hill

Flux Calculations of Eccentric Orbit Extreme Mass Ratio Inspirals Through 7 PN

Zachary Nasipak, The University of North Carolina at Chapel Hill

Improving self-force calculations for generic orbits in Kerr spacetime

Lindsay Sullivan, The University of North Carolina at Chapel Hill

Effects of Three Distinct Musculoskeletal Countermeasures on Bone Health with Varying Flight Duration

Erika Van Goethem, The University of North Carolina at Chapel Hill

Spatially-Resolved Carrier Dynamics in Tungsten Disulfide and Tungsten Diselenide Nanoflakes using Ultrafast Pump-probe Microscopy

William White, Appalachian State University

Further Development of an Electrostatic Filter to Remove Martian Dust from ISRU Gas intakes

Nicholas Wright, The University of North Carolina at Greensboro/NC A&T State University

Multifunctional Molecularly Engineered Materials for Space Power Cross-Cutting Technologies

Christopher Yoder, North Carolina State University

Design of a latitude controller for high altitude balloon systems using a tether and sail