Katherine Rabidoux, Ph.D.

**Award:** Research Infrastructure Program; $9972.00

**Title:** Assistant Professor, Engineering Physics

**Project:** Modeling the star formation histories of local luminous compact blue galaxies

**Abstract:** (Second Paragraph of Proposal)This project will be the first step in developing a new astronomy research program at the University of Wisconsin-Platteville that will involve students in exploring the evolution of galaxies. I will develop this research program in collaboration with researchers at the West Virginia University Center for Astrophysics. In addition, this research will make use of national facilities such as the National Radio Astronomy Observatory and the Green Bank Observatory. The proposed project falls under the Astrophysics Division of the NASA’s Science Mission Directorate. This division searches for answers to the questions “how does the universe work?”, “how did we get here?”, and “are we alone?”. The first two questions explore the universe’s history and evolution, including the evolution of galaxies and the star formation within them. As this project will use the star formation properties of local galaxies to infer the evolutionary paths of galaxies today as well as how past galaxies underwent changes to appear the way they do now, this project aligns well with the Division’s aim to better understand how the universe has evolved.

**Biography:** Katie Rabidoux graduated from Michigan State University with a bachelor’s degree in Astrophysics. She received her M.S. and Ph.D. in Physics from West Virginia University. She studies the evolution of star- forming galaxies. Her Ph.D. thesis work investigated the gas kinematics and global star formation properties of local luminous compact blue galaxies (LCBGs), which are a type of galaxy that was common when the universe was half of its current age but are rare at the present time. She joined the faculty of the Department of Engineering Physics at the University of Wisconsin-Platteville in the fall of 2015.

**Congressional District**: 3

**Congressional Representative**: Ron Kind