Steven Boada, Ph.D

Contact Information

Department of Physics and Astronomy
136 Frelinghuysen Rd
Rutgers University
Piscataway, NJ 08854

Phone: +1 (615) 200-0119
E-mail: boada@physics.rutgers.edu
WWW: http://boada.github.io

Quick Profile

Observation Cosmology, Large-area Sky Surveys (e.g., DES, LSST, SDSS, ACT, SPT), Galaxy Clusters, High Performance Computing (HPC), Galaxy Evolution, Interacting Galaxies and Morphology.

Professional Experience

Rutgers University, Piscataway, New Jersey USA
Postdoctoral Research Associate — **September, 2016 - Present**

Texas A&M University, College Station, Texas USA
Research Assistant — **August, 2010 - 2016**

The University of Tennessee, Knoxville, Tennessee USA
Research Assistant — **August, 2007 - 2009**

National Center for Computational Science, Oak Ridge, Tennessee USA
Visiting Scientist — **May, 2007 - August, 2009**
Carried out the computing projects required to complete Master's, including modeling of interacting galaxy systems, machine learning, and other HPC tasks.

Technical Skills

Machine Learning: Regression, Classification, Feature Engineering, Optimization
Statistical Methods: Regression models, hypothesis testing and confidence intervals, error analysis, image analysis
Software and Computing: Python (e.g. Scikit-learn, Numpy, Scipy, Pandas, Matplotlib), SQL, ANSI C, Linux, Microsoft Excel, GPGPU applications, HPC (100k+ core) applications

Education

Texas A&M University, College Station, Texas USA

Ph.D., Physics (Astronomy focus), August, 2016
- Dissertation Title: "Measuring the Scatter in the Cluster Optical Richness–Mass Relation with Machine Learning"

The University of Tennessee, Knoxville, Tennessee USA

M.S., Physics (Astronomy focus), August, 2009
- Thesis Title: "An Automated Approach to the Study and Classification of Colliding and Interacting Galaxies"

The University of Tennessee, Knoxville, Tennessee USA

B.S., Physics, May, 2007