

## Special Issue

# Application of Machine-Learning Techniques in Astronomical Data Analysis

### Message from the Guest Editor

Galaxies is hosting a Special Issue on machine learning in analyzing astronomical images and data. For this issue, we would like to focus on how new techniques in machine learning have been changing the way data sets are searched and used. We invite researchers to submit papers related to the use of artificial neural networks and other machine learning techniques to astronomical problems such as the classification of objects, searches for gravitational lenses, searches for other rare objects, and the detection of planets. These techniques have been advancing rapidly in recent years, but often in isolation without benefit of what has been learned in other subfields of astronomy. We wish to draw attention to new methods, new benchmarks in performance and to cross pollinate between fields. Keywords:

- machine learning
- deep learning
- neural networks
- data analysis
- gravitational lenses
- data analysis
- object classification
- data mining

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### Guest Editor

Dr. Robert Benton Metcalf

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### Deadline for manuscript submissions

closed (30 June 2018)



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## About the Journal

### Message from the Editorial Board

*Galaxies* provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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### Editors-in-Chief

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