

# Call for Papers for the **Special Issue on Discovery Science** of the **Machine Learning** journal

## **Scope and Background**

The Machine Learning journal invites submissions on Discovery Science - a research discipline concerned with the development and analysis of methods for discovering scientific knowledge, coming from machine learning, data mining, and intelligent data analysis, as well as their applications in various scientific domains. Submissions focusing on the analysis of different types of complex data, such as structured, spatio-temporal and network data are welcome. Submissions addressing applications in scientific domains, such as environmental and life sciences are also welcome. Finally, submissions from the areas of computational scientific discovery, mining scientific data, computational creativity and discovery informatics are encouraged.

## **Topics of interest**

An indicative non-exhaustive list of topics includes

- computational scientific discovery
- data mining and knowledge discovery
- machine learning and statistical methods
- computational creativity
- mining scientific data
- data and knowledge visualization
- knowledge discovery from scientific literature
- mining text, unstructured and multimedia data
- mining structured and relational data
- mining temporal and spatial data
- mining data streams
- network analysis
- discovery informatics
- discovery and experimental workflows
- knowledge capture and scientific ontologies
- data and knowledge integration
- logic and philosophy of scientific discovery
- applications of the above methods in various scientific domains (e.g., bioinformatics, system biology, and climate informatics)

## **Schedule**

Submission deadline: 28 February 2015  
First review results: 15 May 2015  
Revised papers due: 15 June 2015  
Final selection: 31 July 2015  
Publication: Autumn 2015 (planned)

## **Guest editors**

Sašo Džeroski, Jožef Stefan Institute, Slovenia

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