Special Issue

Application of Data Mining in Astronomy and Astroparticle Physics

Message from the Guest Editor

As is the case in many other fields, finding ways to successfully handle a large amount of data is becoming more and more important in Astronomy and Astroparticle Physics. In the case of existing and future projects, tens to hundreds of Petabytes are not unusual. While data storage is mostly a technological challenge, efficient data access and powerful processing becomes a major concern. Low- and high-level data-oriented, very flexible database solutions supersede classical fileoriented tree-like storage systems as an archiving solution. Applying a newly developed analysis method on such a large data set requires the appropriate performance of the storage engine and computing systems involved. Data reduction is highly topical. Supervised and unsupervised feature extraction allow for the production of suitable summary data. The use of common analysis techniques and software facilitate interdisciplinary communication and co-operation, providing a substantial efficiency gain.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

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