Intelligent Data Processing for Fusion Plasma Physics

Guest Editor:

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Deadline for manuscript submissions:
closed (25 October 2021)

Message from the Guest Editor

During the last decade, nuclear fusion experiments have risen to the next level, in both technology and dedication. Diagnostics, especially multi-channel imaging systems, are facing a continuously growing challenge to keep up with the increasing operation times.

Intelligent data processing is a straightforward candidate to relieve this stress, capable of addressing all aspects of the problem. The increased availability of machine learning techniques to a wider audience can offer effective and powerful tools for analyzing large data sets, but they can also be used to compile resource-effective calculations for real-time analysis applications, which can be applied to reduce stored data on-the-fly.

This Special Issue of Applied Sciences, titled "Intelligent Data Processing for Plasma Physics", aims to gather a selection of peer-reviewed scientific papers, outlining how novel data processing techniques such as machine learning can bring about a new era for fusion diagnostics, offering the capability of fast real-time data processing and/or the evaluation of large and complex datasets.

The Special Issue Link:

https://www.mdpi.com/journal/applsci/

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Special Issue

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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 multi-dimensional network.

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