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# **Machine Learning Applications in Seismology**

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#### **Message from the Guest Editors**

In recent years, machine-learning-based artificial intelligence technology has been rapidly applied to digital seismic data processing and developing a structured seismic catalog. Artificial intelligence methods hold significant promise for solving fundamental scientific problems in seismology; AI technology can carry out multiple geophysical observations, so as to identify signals or patterns that cannot be captured by traditional methods unable to easily generate information about strong earthquakes. AI can help us further understand the physical process of earthquakes.

This Special Issue will present innovative ideas and the latest findings in earthquake monitoring, early warning and forecasting systems as developed through different machine-learning-related methods, theories and applications. The scope of this Special Issue includes, but is not limited to: seismic data processing, event location and discrimination, early warning, forecasting, machine learning, deep learning and other applications in seismology.

**Special**sue



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# **Editor-in-Chief**

### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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