



Special Issue Reprint

# Statistics and Pattern Recognition Applied to the Spatio-Temporal Properties of Seismicity

www.mdpi.com/books/reprint/5678

Edited by Stefania Gentili Rita Di Giovambattista Robert Shcherbakov Filippos Vallianatos

ISBN 978-3-0365-4263-8 (Hardback) ISBN 978-3-0365-4264-5 (PDF) Statistics and Pattern Recognition Applied to the Spatio-Temporal Properties of Seismicity

Due to the significant increase in the availability of new data in recent years, as a result of the expansion of available seismic stations, laboratory experiments, and the availability of increasingly reliable synthetic catalogs, considerable progress has been made in understanding the spatiotemporal properties of earthquakes. The study of the preparatory phase of earthquakes and the analysis of past seismicity has led to the formulation of seismicity models for the forecasting of future earthquakes or to the development of seismic hazard maps. The results are tested and validated by increasingly accurate statistical methods. A relevant part of the development of many models is the correct identification of seismicity clusters and scaling laws of background seismicity. In this collection, we present eight innovative papers that address all the above topics.

The occurrence of strong earthquakes (mainshocks) is analyzed from different perspectives in this Special Issue.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/5678

## MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



#### **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



#### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

#### High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

### Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

