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# **Applications of Fisher Information in Sciences II**

Guest Editor:

### Dr. Takuya Yamano

Department of Mathematics and Physics, Faculty of Science, Kanagawa University, 3-27-1 Rokkakubashi, Yokohama 221-8686, Kanagawa, Japan

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## **Message from the Guest Editor**

It is well recognized that Ronald A. Fisher originally presented Fisher information in his statistical estimation theory a century ago, and that it has offered an indispensable tool with which to analyze statistical systems. To date, it has also received extensive attention from researchers working in fields beyond statistics. Statistical physics, thermodynamics, and quantum science are, indeed, intimately associated with this measure. In addition, astronomy and biological sciences reap most of the benefits of this tool for big data analysis. The applications of Fisher information are in fact vast, and have played expanding roles in the advancement of each discipline. For example, precise temperature measurement and its development are becoming crucial tasks in modern quantum technologies and the advancement thermodynamics in the quantum region.

In this renewed Special Issue, we would like to compile articles addressing the fundamental aspects of Fisher information and its applications in various fields. We welcome submissions that shed new light on the scope of this information's in-depth features and unreported useful applications.







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#### Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

# **Message from the Editor-in-Chief**

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

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