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Role of Symmetric Cryptography for Blockchain Technology

Guest Editor:

Dr. Achyut Shankar

Department of Cyber Security, University of Warwick, Coventry CV4 7AL, UK

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Message from the Guest Editor

Dear Colleagues,

Blockchain and cryptographic technologies have been acknowledged as being of utmost significance for security, privacy, and a wide range of uses within cyberspace. The widespread use of blockchain and cryptographic techniques has created difficulties for the creation of sophisticated methods with high security and minimal overheads. Therefore, in this Speculal Issue, we seek efficient and secure blockchain approaches as well as lightweight cryptographic methods with verifiable security. We pay significant attention to the use of advanced mathematical techniques and concepts to create sophisticated blockchain consensus protocols that do not rely heavily on energy usage and also the use of information theory and coding results to create advanced symmetric key cryptography primitives.

Specialsue

Dr. Achyut Shankar *Guest Editor*



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Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

 Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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Symmetry Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/symmetry symmetry@mdpi.com X@Symmetry_MDPI