

Special Issue

Security Analysis of Symmetric and Asymmetric Cryptographic Implementations

Message from the Guest Editor

- The Special Issue, “Security Analysis of Symmetric and Asymmetric Cryptographic Implementations” aims to provide researchers from cryptographic engineering community an location to share their latest research outcomes in the security analysis of both symmetric and asymmetric cryptographic implementations. Firstly, considering that post-quantum cryptographic algorithms are designed to meet security requirement in quantum computing scenario, we should focus on the security of post-quantum cryptographic implementations. Secondly, considering that the size of electronic chips becomes smaller and smaller, we should also focus on the security of lightweight block cipher implementations and some efficient stream cipher implementations. Finally, for a long period of time, there lacks theoretical explanations about the security of cryptographic implementations in face of side-channel cryptanalysis. In light of this, we should focus on building theoretical model that can accurately and efficiently reflect the security of cryptographic implementations in face of different styles of side-channel cryptanalysis.

Guest Editor

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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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