Extreme Universe The 20th Colloquoun November 14th (Tue.) HyBRID ZOOM + Masukawa Hall, Kyoto University November 14th (Tue.) 1:00 ann (JST) November 14th (Tue.) 1:00 - 2:00 ann (GMT) November 14th (Tue.) 1:00 - 2:00 ann (GMT) Offline chatting TIME



11:00 - 12:00 am (JST)

Registration required (click HERE)

Extreme Universe, JAPAN Q Speaker Prof. Anne Broadbent

Universiy of Ottawa

Title Quantum Unclonability and Cryptography

Abstract



According to the unclonability principle of quantum information, it is not possible, in general, to duplicate an unknown quantum state. Quantum Cryptography benefits from this principle since any attack is subject to the unclonability principle; this creates a myriad of opportunities for quantum cryptographers. In this talk, we will discuss how unclonability permeates quantum cryptography: from the early findings on quantum money and quantum key distribution, to recent work on unclonable quantum encryption, certified deletion, and unclonable software.

MEXT -KAKENHI- Grant-in-Aid for Transformative Research Areas (A) The Natural Laws of Extreme Universe -A New Paradigm for Spacetime and Matter from Quantum Information-