

## ATENEO



# Ryutaroh Matsumoto

*Nagoya University, Japan*

## ***Exploring Quantum Supremacy in Access Structures of Secret Sharing by Coding Theory***

**Abstract:** Quantum supremacy or quantum advantage is the potential ability of quantum computing devices to solve problems that classical computers practically cannot (Wikipedia). The speaker recently found that quantum computation can realize secret sharing schemes that cannot be realized by any classical computation. That finding was enabled by combinatorial studies of quantum error-correcting codes and classical secret sharing. This talk introduces those studies to non-specialists with mathematical backgrounds.

Reference: arXiv:1803.10392

**Sala de Grados I, Facultad de Ciencias  
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