THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

MATHEMATICS COLLOQUIUM

From knots to numbers: classical and quantum

By

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Abstract

Embedded loops in 3-space (known as knots) were introduced in the 1860s by Tait and Kelvin as an attempt to understand atoms in the aether. A hundred years later, they were understood geometrically by Thurston in the 1970s. And then, unexpectedly, the famous Jones polynomial was found in the 1980s, which led to deep questions on quantum field theory, arithmetic, geometry and topology. I will give a brief history of the subject, illustrated with examples and challenges.

Date : **6 October 2023 (Fri)**
Time : **3:00pm – 4:00pm**
Venue : **Lecture Theater F (Lifts 25/26)**

All Are Welcome!