

SBU Math Club Guest Talk

Prof. Ruth Lawrence

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Math Tower Room P-131

The topic of knots in three-dimensions is a classical one going back to ancient times. The mathematical theory of knots received a significant boost 150 years ago due to Lord Kelvin's proposal of the theory of vortex atoms. With the rise of topology, classical topological techniques were applied around 100 years ago and less, but the field was revolutionized again with the onset of "quantum" topological invariants, the first of which was the Jones polynomial discovered in 1984. We will take a flying tour through some elementary knot theory with many explicit examples of knots, links and their invariants, and gain a hint as to why the topic is connected to so many others in mathematics. No prior knowledge will be assumed.