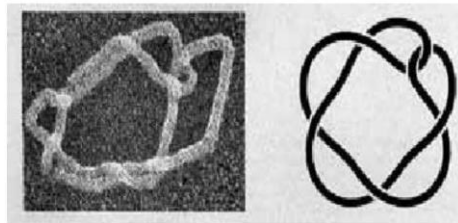


Graduate Math and Physics Seminar

SKEIN RELATIONS AND KNOT THEORY: FROM TOPOLOGY TO DNA

Dr. David Crombecque
University of Southern California

Abstract: KNOT THEORY is a subfield of TOPOLOGY, in which we try to distinguish actual knots using mathematical invariants associated to knots. In this talk, we will give an introduction to Knot Theory focusing on classic mathematical invariants build from actual drawings of knots using what we call SKEIN RELATIONS. Skein relations translate relations between knot diagrams (drawings) into algebraic relations for polynomials. We will then see how these Skein Relations are connected to the way DNA is modified through the action of certain enzymes. Feel free to bring a piece of string to play along!



When: Monday, March 25, 2019, 6:00 – 6:50 pm

Where: CSUCI, Sierra Hall 2411

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