Temple University Mathematics Colloquium

Jesse Johnson

Yale University

will speak on

Common stabilizations of Heegaard surfaces

ABSTRACT: A Heegaard surface is an embedded surface in a 3–dimensional manifold that cuts the 3–manifold into two simple pieces called handlebodies. It is known that any two Heegaard surfaces for the same 3–manifold are related by a sequence of simple moves called stabilizations, but it is unknown in general how many stabilizations are needed to relate two arbitrary Heegaard splittings. I will describe examples in which a relatively large number of stabilizations are needed. In these examples, it is necessary to pass through an intermediate surface whose genus is roughly double the genera of the original Heegaard surfaces.

Monday, 3 November 2008
Lecture at 4:00 pm
Coffee, tea, and refreshments from 3-5 pm
Room 617, Wachman Building
Department of Mathematics