

1067-57-383

**John R. Burke\*** (jrburke@wesleyan.edu), John R. Burke, Middletown, CT 06457. *Genetic infection by string links and new structure of the knot concordance group*. Preliminary report.

In the talk, we will define the concordance group of knots and discuss the  $n$ -solvable filtration of this group defined by Cochran, Orr, and Teichner. We will then discuss some of the previous results about the structure of the concordance group, in particular, the structure of the abelian quotient groups,  $G_n$ , of  $n$ -solvable knots modulo  $n.5$ -solvable knots. We will end by discussing how by using genetic infection with string links and not knots alone one can construct knots in  $G_n$  which are linearly independent from previously studied knots. (Received August 30, 2010)