1077-57-2018 John R. Burke* (jburke@ric.edu), Mathematics and Computer Science Department, Rhode Island College, 600 Mount Pleasant Avenue, Providence, RI 02906. Why you should infect your knots with links. 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 then define string link concordance groups and end by discussing how using genetic infection with string links and not knots alone one can construct knots of infinite order in G_n which are linearly independent from nearly all previously studied knots in G_n . (Received September 21, 2011)