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Taylor E Martin* (taylor.martin@shsu.edu), 1900 Ave I, Huntsville, TX 77340. *Link concordance, Milnor invariants, and low-order solvability*. Preliminary report.

In the 1950's, Milnor introduced numerical invariants that generalize linking number; these have since been known as Milnor's $\bar{\mu}$ -invariants. Since their introduction, Milnor invariants have proven extremely useful in many aspects of the study of links, including link concordance, finite type invariants, and virtual links. Unfortunately, only the first non-vanishing Milnor invariants are well-defined; Habegger and Lin showed that the indeterminacy of Milnor invariants correspond to the indeterminacy of representing a link as the closure of a string link.

In this talk, we will discuss aspects of the role of Milnor invariants in studying link concordance - in particular, as they are used in studying Cochran, Orr, and Teichner's n -solvable filtration of the (string) link concordance group. We will also discuss some new ideas of how we may hope to embrace the indeterminacy of Milnor's invariants in the presence of non-trivial linking number. (Received September 17, 2019)