1067-54-788 **Carolyn A Otto*** (co1@rice.edu), 3133 Buffalo Speedway, Apt #7304, Houston, TX 77098.

"The (n)-Solvable Filtration of the Link Concordance Group and Milnor's Invariants".

I will give several results about the (n)-solvable filtration of the string link concordance group, denoted $\mathcal{F}_n$. First, I will establish a relationship between (n)-solvability of a link and its Milnor's $\bar{\mu}$-invariants. Using this, I will show the "other half" of the filtration, $\mathcal{F}_{n.5}/\mathcal{F}_{n+1}$, is nontrivial for links with sufficiently many components. Also, I will show that links modulo 1-solvability is a non-abelian group. Finally, I will show that $\mathcal{F}_n/\mathcal{G}_{n+2}$ is nontrivial for sufficiently many components. That is, the Grope filtration, $\mathcal{G}_n$ of the link concordance group is not the same as $\mathcal{F}_n$. (Received September 14, 2010)