1125-VU-2660 **Cary Malkiewich*** (`cmalkiew@illinois.edu`). *The Reidemeister trace in pictures.*

We give a brief pictorial exposition of joint work with John Lind, in which we build a geometric model for the "refined Reidemeister trace." When $E \to B$ is a smooth fiber bundle, this gives a stable map between the spaces of free loops $LB \to LE$. If time permits, we will sketch the generalizations and their applications, which range from dynamics on compact manifolds to algebraic K-theory. (Received September 20, 2016)