1127-55-22 **Nima Rasekh*** (rasekh2@illinois.edu), Altgeld Hall, 1409 W. Green Street, URBANA, IL 61801. *Composition Fibrations: How Base Change can preserve Equivalences of Higher Categories.*

There are various models of higher categories, each of which comes with its own strengths and weaknesses. Two of the most famous models are quasi-categories and complete Segal spaces. Despite their many strengths, one of their weaknesses is the fact that these two models are not right proper, meaning that base change along fibrations does not preserve equivalences. Thus, we might ask ourselves which maps will preserve equivalences. The goal of this talk is to introduce a new class of maps, composition fibrations, that satisfies the desired property stated above. After introducing its key features, I will discuss some relevant examples and show how it leads to interesting implications. If time permits, I will also sketch out a proof on why composition fibrations preserve equivalences. (Received December 27, 2016)