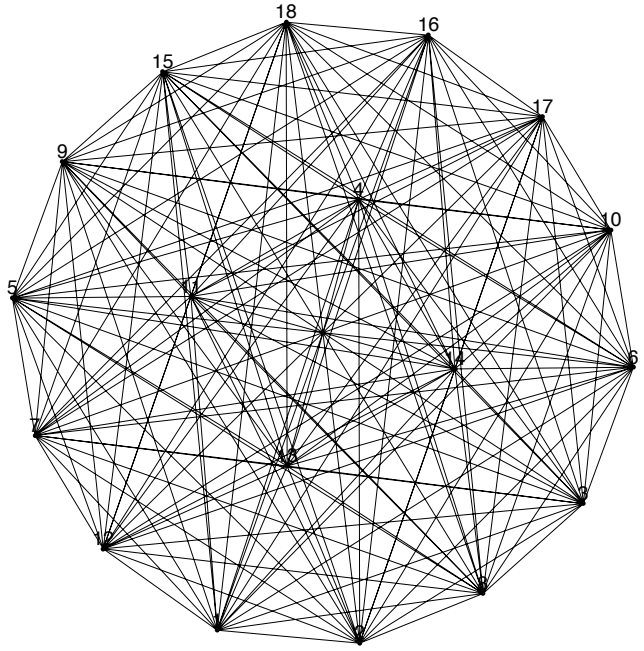
SEMINAR:

HIGHER CATEGORIES AND HOMOTOPICAL ALGEBRA

USC



Prerequisites. We hope to not assume the most, but the person participating will ideally have experience with category theory (and to a greater benefit homological algebra). But we do not in fact assume experience with classical homotopy theory of simplicial sets and algebraic topology.

ORGANIZERS

Aaron Andrews
Juan Serratos

VENUE

TBD, USC.

HOMOTOPY THEORY

There are many motivations to begin learning about ∞-categories, which can be viewed as a homotopy theory version of category theory. There exists many applications of ∞-categories such as in logic (e.g. homotopy type theory), derived algebraic geometry, and so on. For those interested in the latter, a goal of this course could be to learn the tools to begin reading Lurie's thesis afterwards; for those interested in algebra, learning about ∞-categories will be useful to learn about the derived settings; for those interested in (algebraic) topology, ∞-categories come from your field! A determined seminar outline has yet to be made, but updates will be available on the website:
notsatos.github.io/posts/htseminar/

CONTACT

Juan Serratos, jserrato@usc.edu

WEBPAGE

NOTSATOS.GITHUB.IO/POSTS/HTSEMINAR/

FALL · 2023