Title: Higher semiadditivity in chromatic homotopy theory

Abstract: Chromatic homotopy theory begins with the discovery that in the world of higher algebra there are more "primes" than in ordinary algebra. More concretely, for every ordinary prime p, one has a sequence of "chromatic primes" indexed by a parameter $0 \leq n \leq \infty$ called *height*. The case $n = 0$ corresponds to the ordinary prime 0 and the case $n = \infty$ corresponds to the ordinary prime p, while the rest provide a certain interpolation between the two. Higher algebra in these "intermediate characteristics" exhibit rather remarkable properties including *higher semiadditivity*, a notion introduced by Hopkins and Lurie. In this talk, I will give a soft exposition of this theory and some further developments by Shachar Carmeli, Tomer Schlank and myself.