## Topology Seminar

## Jay Shah

of MIT will be speaking on

## Parametrized higher category theory

on May 1 at 4:30 in MIT Room 2-131

Parametrized or indexed  $\infty$ -category theory studies  $\infty$ -categories fibered over a given base  $\infty$ -category. This theory can be harnessed for the purposes of equivariant homotopy theory when one specializes to the case where is the base is the orbit category of a finite group. In this talk, we present a theory of parametrized homotopy limits and colimits that recovers and extends the Dotto-Moi theory of G-colimits. We apply this theory to prove that the G- $\infty$ -category of G-spaces is freely generated under G-colimits by the contractible G-space, thereby affirming a conjecture of Mike Hill.

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