## Topology Seminar

## Vesna Stojanoska

of MIT will be speaking on

## A Study of tmf Cooperations

on October 22 at 4:30 in MIT Room 2-131

We combine three strategies to studying cooperations in connective topological modular forms: the Adams spectral sequence and its relation to Brown-Gitler modules following Mahowald's approach to cooperations in connective real K theory, Laures's theory of q-expansions of multi-variable modular forms, as well as level structure approximations. As a result, we obtain an algorithmic procedure for determining the structure of the smash product of tmf with itself. This is a report on joint work in progress with Behrens, Ormsby, and Stapleton.