## Nathalie Wahl (Copenhagen / IHES)

## Higher string topology via Hochschild homology

## Abstract :

We construct universal operations in Hochschild homology and use them to define nontrivial higher degree operations on the homology of the free loop space of a manifold associated to surfaces of any genus and any number of boundary components. These operations are parametrized by Sullivan diagrams, which model a partial compactification of the moduli space of Riemann surfaces