

- **Seyedhosseini, Mehran: Around the Relative Index (SR1 c)**

I will first recall the construction of the relative index map of Chang, Weinberger and Yu and the definition of the relative index of Dirac operators on manifolds with boundary.

This will be followed by a discussion of the relationship between the relative index and absolute indices defined in the presence of positive scalar curvature (psc) at the boundary. This relationship can be used to give a conceptual proof of the fact that the relative index is an obstruction to the existence of a psc metric.

Finally, I will sketch how one can define secondary invariants associated to psc metrics on manifolds with boundary.