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*Lefschetz formula for weighted cohomology and discrete series characters  
for real groups*

This talk will begin with a review of some background material concerning weighted cohomology of reductive Borel- Serre compactifications of locally symmetric spaces (work of Goresky-Harder-MacPherson) as well as the Lefschetz formula for Hecke correspondences operating on weighted cohomology (work of Goresky-MacPherson). Next will come a review of how these topics are related to characters of discrete series representations of real reductive groups (work of Goresky-Kottwitz-MacPherson). The last topic will be a related fact about discrete series characters, particular to the Hermitian symmetric case, that is likely to be relevant when studying the Lefschetz formula for compactified Shimura varieties modulo  $p$ .