

In this talk we review several so-called restriction problems of holomorphic and Maass cusp forms in the fundamental domain. Restrictions to geodesic segments in the fundamental domain play a crucial role in detecting sign changes of cusp forms, as we will explore. The problems at hand are intimately related to moments of  $L$ -functions and shifted convolution problems. We highlight differences and similarities between the holomorphic and real analytic case. Finally, we will explore how to detect a sharp upper bound for the number of sign changes for almost all holomorphic Hecke cusp forms in a compact interval on the vertical geodesic (this is ongoing work).