1151-11-293   **Nha X Truong*** (`nha.truong@uconn.edu`). *An example of explicit computation of the U_5 operators.*

I will talk about an example I computed in the ongoing project to prove the Ghost Conjecture of Bergdall and Pollack . The conjecture predicts the slope of p-adic automormphic form. Using Jacquet-Langland correspondence, we can study the overconvergent p-adic automorphic forms for definite quaternion algebra instead. The advantage of this approach is that we can work with these forms combinatorically. For example, we were able to compute the matrix of the Hecke operator U_5 on the space of the overconvergent 5-adic autormorphic forms and deduced some interesting facts. In this lecture, I will talk about the computation and if the time permits, I will explain how to prove these facts and how it helps in the quest to prove the Ghost conjecture (Received August 20, 2019)