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*Examples of automorphic forms on the unitary group  $U(3)$*

In this talk, we will present examples of automorphic forms on the unitary groups in three variables attached to various quadratic extensions  $E/F$ . We will then study their corresponding Galois representations. Namely, we will determine the set of exceptional primes which corresponds to the  $p$ -adic family attached to each of the forms. Those sets which are very important for arithmetic applications, have been determined for classical modular forms by works of Serre, Ribet and others. But there is no known result in the case of the  $U(3)$ .