

ORDINARY FAMILIES FOR DEFINITE UNITARY GROUPS

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In these lectures, we study families of automorphic forms on definite Unitary groups. The material will be divided as follows:

- (1) In the first lecture, we will define automorphic forms on definite unitary groups.
- (2) We study the Hecke algebras associated to these forms.
- (3) We construct Hida families via a control theorem for the ordinary Hecke algebras.
- (4) We associate Galois representations to these automorphic forms.

The main reference for these lectures is [1, §2].

REFERENCES

- [1] D. Geraghty. *Modularity lifting theorems for ordinary Galois representations*, Preprint available at <https://www2.bc.edu/david-geraghty/>