

Modular interpretation and equations for modular varieties

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This mini-course will focus on examples of the modular interpretation of holomorphic automorphic forms and on their use in finding explicit equations for modular varieties.

1. Modular curves, elliptic modular forms, and moduli of elliptic curves
2. More general families of abelian varieties and the corresponding modular varieties
3. Graded rings of holomorphic automorphic forms and their relation to Hecke operators
4. Implicit equations for modular varieties by interpolation of special values of automorphic forms