

The Modular Forms Database: Tables

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My Tables

WARNING: The dynamic query-based tables no longer work, since I have not had time to maintain this database in years. Please see also the newer [LMFDB](#).

Modular Abelian Varieties A_f that are Jacobians of Curves

- [Basic Data](#)

Hilbert Modular Forms

Elliptic Curves

- [Noam Elkies: Tables of Elliptic curves of unit discriminant over real quadratic number fields](#)

Tables Over The Field $\mathbb{Q}(\sqrt{5})$

- [Dimensions of spaces of Hilbert modular forms, by level](#)
- [Factored characteristic polynomials of Hecke operators](#)
- [Rational Hilbert modular forms \(these correspond to isogeny classes of elliptic curves over \$\mathbb{Q}\(\sqrt{5}\)\$ \)](#)

Dimensions of Spaces of Cuspforms

- [Dimensions](#) of $S_k(\Gamma_0(N))$, $S_k(\Gamma_1(N))$, and $S_k(\Gamma_1(N))(\text{eps})$.
- PARI-readable [dimension tables for \$\Gamma_0\(N\)\$](#)
- MAGMA-readable [dimension tables for \$\Gamma_1\(N\)\$ with character](#)

Characteristic Polynomials

- [Characteristic polynomials of \$T_p\$ on \$S_k\(\text{SL}_2\(\mathbb{Z}\)\)\$](#)
- [Characteristic polynomials of \$T_p\$ on \$\Gamma_0\(N\)\$ and \$\Gamma_1\(N\)\$](#)
- [Discriminants of Hecke algebras](#)
- [Arithmetic data](#) about *every* weight 2 newform on $\Gamma_0(N)$ for all $N < 5135$ (contains charpolys of many eigenvalues).

Eigenvalues and q-expansions of Cuspforms

- [q-expansions of newforms](#)
- [Basis of cuspforms](#)
- [q-expansions of eigenforms on \$\Gamma_0\(N\)\$ of weight \$k \leq 14\$](#)
- [q-expansions of eigenforms on \$\Gamma_1\(N\)\$ of weight \$k \leq 50\$](#)
- [Eigenvalues of modular forms on \$\Gamma_0\(N\)\$ of weight \$\leq 4\$ and high level, and of weight \$\leq 100\$ and low level](#)
- [Eigenforms on \$\Gamma_0\(p\)\$ in terms of the free-abelian group on supersingular j-invariants](#)

Elliptic Curves

- [PARI Tables of Cremona Elliptic Curves](#)