Maass forms and L-functions
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This course will focus on computations of general modular forms (not necessarily holomorphic) and their associated L-functions. The following topics will be discussed:

1. Modular forms:
    (a) Maass forms, heuristic and provable algorithms
    (b) trace formula techniques
    (c) higher rank
2. L-functions:
    (a) FFT-based algorithms
    (b) testing the Riemann hypothesis
    (c) Example case: Artin L-functions