p-ADIC FAMILIES OF MODULAR FORMS

R. SUJATHA

The first example of a p-adic family of modular forms was the Einsenstein family studied by Serre as part of his larger study on congruences. Hida's work carried this much further, integrating it with the theory of Galois representations and Hecke algebras. We shall provide a survey of these topics in the course.

REFERENCES

[1] M. Emerton: *p-adic families of modular forms [after Hida, Coleman, and Mazur].* Seminaire Bourbaki, 2009/2010, expose 1013, Asterisque 339 (2011), 31-61.

[2] H. Hida: *Iwasawa modules attached to congruences of cusp forms.* Ann. Scient. Ec. Norm. Sup. 4th series 19 (1986), 231-273.

[3] H. Hida: *Elementary Theory of L-functions and Eisenstein series.* Cambridge University Press, (1993), Book.

[4] D. Banerjee, E. Ghate, V.G.N Kumar: Λ-*adic forms and the Iwasawa main conjecture.* `http://www.math.tifr.res.in/~eghate/lectures.pdf`