

References for Peter Sarnak's course at AWS 2001

SURVEY:

1. Iwaniec and Sarnack, "Perspectives on the analytic theory of L -functions," to appear in *GAF*A (2001).

SUBCONVEXITY:

2. Friedlander and Iwaniec, "A mean value theorem for character sums," *Michigan Math Jnl* **39**, 153-159 (1992).

3. Duke, Friedlander and Iwaniec, "Bounds for automorphic L -functions I and II," *Invent. Math* **112**, 1-8 (1993); *Invent. Math* **115**, 219-239 and 209-217 (1994).

4. Sarnak, "Estimates for Rankin Selberg L -functions and quantum ergodicity," preprint 2001.

5. Sarnak, "Integrals of products of eigenfunctions," *Imrn* **6**, 251-260 (1994).

SPECIAL VALUES OF L -FUNCTIONS:

6. Waldspurger, "Sur les coefficients de Fourier – demi entier," *J. Math. Pures et Appl.* **60**, 365-384 (1981).

7. T. Watson, "Rankin triple products and quantum chaos," *Thesis Princeton U* (2001).

NON-VANISHING AND MOLLIFICATION:

8. Iwaniec and Sarnak, "The non-vanishing of central values of automorphic L -functions and Landau-Siegel zeros," *Israel Math Jnl*, Feb. 2001.

9. Kowalski, Michel and Vanderkam, "Mollification of the fourth moments of automorphic L -functions and arithmetic applications," *Invent.* **142**,

95-151 (2000).

PETERSSON FORMULA:

10. Iwaniec, "Topics in classical automorphic forms," *G.S.M. AMS*, Vol. **17** (1997).

FAMILIES AND SYMMETRY:

11. Katz and Sarnack, "Zeros of zeta functions and symmetry," *BAMS*, **36**, 1-26 (1999).

12. Keating and Snaith, "Random matrix theory and L -functions at $S = \frac{1}{2}$," *Comm. Math Phys.* **214**, 91-110 (2000).

13. P. Michel, "Repartition des zeros des fonctions L et matrices aleatoires," *Seminar Bourbaki*, March 2001.