1096-11-2024   **J. Brian Conrey*** (`conrey@aimath.org`), AIM, 360 Portage Ave, Palo Alto, CA 94306. *The mean square of the Riemann zeta-function and its twists.* Preliminary report.

In joint work with Sandro Bettin, we investigate the mean-square of the zeta-function on the critical line and its twists by $(h/k)^{it}$. These investigations have connections with zeros on the critical line, with the Riemann Hypothesis, and with the ratios conjecture. (Received September 17, 2013)