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Sneha Chaubey* (chaubey2@illinois.edu), **Amita Malik**, **Nicolas Robles** and **Alexandru Zaharescu**. *Zeros of normalized combinations of the Riemann Xi function on the critical line.*

We consider functions of the form $F_{\vec{c},a,T}(s) = \sum_{j=0}^M \frac{c_j(-1)^j}{L^{2j}} \xi^{(a+2j)}(s)$, with $L = \log \frac{T}{2\pi}$ and c_j real constants satisfying certain constraint. We show that as $T \rightarrow \infty$, the proportion of zeros of $F_{\vec{c},a,T}(s)$ on the critical line $\text{Re}(s) = 1/2$ tends to 1, at a rate depending on a but not on the choice of the c_j 's. (Received September 13, 2016)