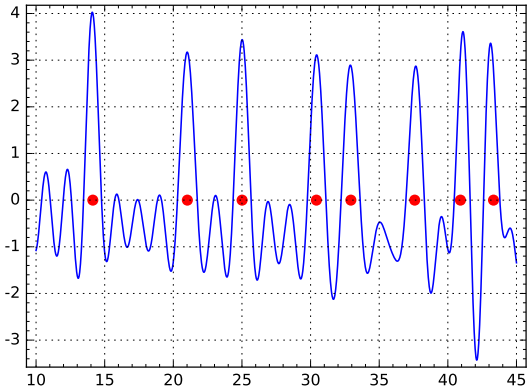
Prime Number and Zeta Zero Spectrum

Prime powers: $p^n = \{2, 3, 4, 5, 7, 8, 9, 11, 13, 16, 17, 19, ...\}$
Zeta zeros: $\rho = \{14.13, 21.02, 25.01, 30.42, 32.94, 37.59, 40.92, 43.33, \dots\}$

From prime powers to zeta zeros:

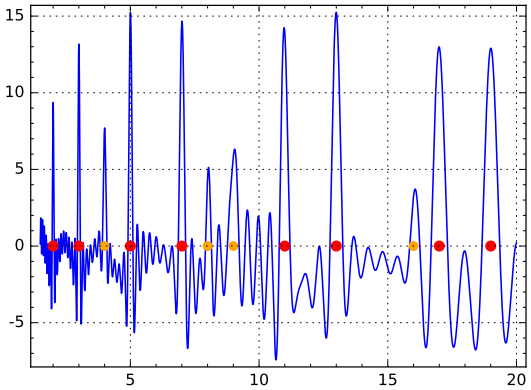
$$S_p(x) = -\sum_{p^n} \frac{\log(p)}{p^{n/2}} \cos(x \log(p^n)) \tag{1}$$



$S_p(x)$ summed over prime powers up to 50.

From zeta zeros to prime powers:

$$S_\rho(x) = -\sum_{\rho} \cos(\log(x)\rho) \tag{2}$$



$S_\rho(x)$ summed over 50 zeta zeros.

J. Rugis
Maraetai, New Zealand