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**Maksym Radziwill\*** ([maksym@stanford.edu](mailto:maksym@stanford.edu)). *Zeros of  $\zeta$ , of  $\zeta'$ , and of Siegel.*

The distribution of the zeros of the derivative of the Riemann zeta-function seems to depend on the distribution, both horizontal and vertical, of the zeros of the Riemann zeta-function. Motivated by applications to the class number problem and the non-existence of Siegel zeros, Farmer and Ki have recently conjectured a precise relationship between the distribution of these two sets of zeros. I will describe the ideas behind my proof of Farmer and Ki's conjecture, the connection between the distribution of these three sets of zeros ( $\zeta$ ,  $\zeta'$  and Siegel) and the relevance of each set of zeros to number-theoretic problems. I will argue that the three sets are best understood when their inter-relationships are exploited. (Received November 27, 2012)