1018-01-145   **Jennifer E Beineke*** (`jbeineke@wnec.edu`), Department of Mathematics, Western New England
College, 1215 Wilbraham Road, Springfield, MA 01119. *One hundred years of Voronoi
summation.* Preliminary report.

We will survey the history and development of Voronoi summation over the past century. We will begin with the origins of Voronoi summation in Dirichlet's Divisor Problem, and we will consider Oppenheim's 1927 generalization of the summation formula. We will also discuss how, in more recent years, such formulas have been used to obtain asymptotic expressions for moments of the Riemann zeta function. (Received March 03, 2006)