

1023-01-683

**Deborah A. Kent\*** (deborahk@sfu.ca), Simon Fraser University, Department of Mathematics, 8888 University Drive, Burnaby, BC V5C 1G8, Canada. *Motivation and Context for B. Peirce's Linear Associative Algebra*. Preliminary report.

Throughout the nineteenth century, the mathematical work of Harvard professor Benjamin Peirce primarily involved applied or analytic areas as well as astronomy. Nonetheless, Peirce's most well-known and widely-read work today is *Linear Associative Algebra*, which contains results foundational to the structure theory of algebras. He presented this work to a mystified audience at the National Academy of Sciences in 1870 and it finally appeared in the *American Journal of Mathematics* after Peirce's death in 1881. Peirce's paper initially seems anomalous given his earlier research interests, yet—considered in context of his motivation and understanding of the discipline—*Linear Associative Algebra* comes into focus as the culmination of a life's mathematical work. (Received September 20, 2006)