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*Mathematical problems in the "shoebox collection" of the Paul A.M. Dirac papers at Florida State University: Piecing together parts of the puzzle.*

The Special Collections and Archives Division of the Florida State University Libraries now houses the complete papers of Paul A. M. Dirac (1902 – 1984), who was a faculty member at FSU from 1972 until his death in 1984. We are collaborating with Special Collections and Archives on the digitization and preservation (with the use of MAA funds) of an important subset known as the “shoebox collection.” There were three goals for our project. First, we reconstructed the initial evidence found in the collection to describe Dirac’s process and general solution of polynomial equations. Second, we compared Dirac’s work with the processes and solutions known to be the subject of mathematical training at Cambridge and the University of Bristol when Dirac was a student at each institution. Finally, we sought to highlight interesting mathematical investigations from Dirac’s personal papers that will be available as part of the Florida State University Digital Library (FSUDL). In this talk, I will share information about the digital library efforts at FSU, a few details of Dirac’s personal and professional life, and an analysis (and in some cases, a reconstruction) of several examples of solving polynomial equations found in the “shoebox collection.” (Received September 01, 2014)