1107-01-174 **David Lindsay Roberts*** (robertsdl@aol.com). Number theory proofs in nineteenth-century American algebra textbooks: the Good, the Bad and the Ugly. Preliminary report.

College algebra textbooks in the nineteenth-century United States were largely algorithmic; they set out step by step procedures for tasks such as extracting roots, expanding powers of binomials, or solving quadratic equations. But on occasion some textbook writers were moved to attempt the proof of a theorem. Basic properties of prime numbers seem to have been especially likely to inspire efforts at proof. The reasoning varied markedly by modern standards of rigor, with some writers assuming key subtleties to be obvious or even applying outright circularity. In this talk I will discuss some of these proofs, and their authors. (Received January 13, 2015)