1125-P1-1617 **Janet Heine Barnett*** (janet.barnett@csupueblo.edu). *Read the masters! Learning abstract algebra via Primary Source Projects.*

The ring concept has deep historical roots that include the work of Richard Dedekind on algebraic number theory in which the concept of an ideal first appeared. Between 1871 and 1894, Dedekind published four versions of his theory of ideals, none of which simply revised an earlier paper. The mathematical insights resulting from these years of re-working and the clarity with which he expressed those insights make Dedekind a master well worth reading even today. This talk describes a 'Primary Source Project' (PSP), based on Dedekind's original writing, that can be used to learn elementary ring and ideal theory in today's abstract algebra classroom. Through guided reading of excerpts from Dedekind, students encounter his original motivations and develop their own understanding of these ideas by completing a set of tasks interspersed between those excerpts. Overviews of a companion PSP for learning group theory and of the pedagogical principles guiding the NSF-funded project *Transforming Undergraduate Mathematics via Primary Historical Sources* that is supporting development of a collection of PSPs for topics throughout undergraduate mathematics curriculum will also be provided. (Received September 18, 2016)