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Cody L Patterson* (codypatterson@txstate.edu), Department of Mathematics, Texas State University, 601 University Drive, San Marcos, TX 78666, and **Christopher Duffer** (christopher.duffer@utsa.edu), Department of Mathematics, University of Texas at San Antonio, One UTSA Circle, San Antonio, TX 78249. *Building connections to secondary algebra teaching in a course on ring and field theory.*

The study of ring and field theory at the undergraduate level provides rich opportunities for students to reflect on procedures and problem solving strategies often taken for granted, such as solving polynomial equations by factoring, searching for rational roots of polynomials, and identifying and using conjugates of algebraic numbers to rewrite expressions. In this talk, we will discuss some key opportunities to develop secondary algebra teaching as an application of abstract algebra. We will also share some pedagogical strategies we have used to encourage students to make connections between secondary and abstract algebra, and some tensions we have uncovered along the way. (Received September 17, 2019)