1123-15-231   **J Ding***, Department of Mathematics, Hattiesburg, MS 39406, and **Q Dong**. *Complete Commuting Solutions of a Class of Quadratic Matrix Equations.*

Given a nilpotent matrix A, we solve the quadratic matrix equation $AXA = XAX$, sometimes called the Yang-Baxter-like matrix equation, to find all the commuting solutions. The strategy is to use the Jordan form J of A and then solve a simplified quadratic matrix equation $JYJ = YJY$. (Received August 27, 2016)