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Noureen A. Khan* (noureen.khan@unt.edu), 7300 Houston School Rd., Dallas, TX 56241, and **Mieczyslaw K. Dabkowski, Ramanjit K. Sahi** and **Slavik V. Jablan**. *"On 4-move equivalence classes of knots and links of two components"*.

Study of equivalence classes of links modulo rational moves is important for development of the theory of invariants based on skein module deformations of rational moves. In particular, knowing equivalence classes of links modulo a chosen rational move provides a valuable insight into the structure of the generating set of the corresponding skein module. While studying a particular instance of tangle replacement moves, it is important to answer whether the move has unknotting property. A tangle replacement move has unknotting property if using the move and isotopies one is able to change every link into the trivial link. In the past it had been shown that the 3-moves and the rational (p/q) -moves (p -prime, $p \geq 5$ and q an arbitrary integer) are not unknotting operations. In this paper, we focus on 4-moves and we study its equivalence classes for knots and links of 2 components. In particular, we show that all links of 2 components up to 11 crossings, and alternating links of 2 components up to 11 crossings can be reduced by 4-moves to the trivial link, or to the Hopf link. (Received February 12, 2010)