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Emili Moan* (pricee4@winthrop.edu) and **Joseph Rusinko**. *Combinatorics of Linked Systems of Quartets*.

We apply classical quartet techniques to the problem of phylogenetic decisiveness and find a value k such that all compatible quartet systems with at least k quartets are decisive. Moreover, we prove that this bound is optimal and give a lower-bound on the probability that a compatible collection of quartets is decisive. (Received September 16, 2014)