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Chase T Worley* (chase.worley@maryvillecollege.edu), 912 Enterprise Way, Maryville, TN 37801. *Commuting Squares of Bismash Product Hopf Algebras*. Preliminary report.

We construct a new class of commuting squares which we call bismash commuting squares. They are obtained from bismash product Hopf algebras based on exact factorizations of finite groups, L . We recall Nicoara's definition of the defect of a commuting square, and then investigate the defect of a bismash commuting square which leads us to the conjecture that the defect of the commuting square is equal to the defect of the group L . We are able to calculate the defect for easy examples coming from group theory. We prove this conjecture when L is the direct or semidirect product of two proper subgroups. This is joint work with Remus Nicoara and Ian Francis. (Received September 26, 2017)