

1086-VN-2805 **Scott Lacy*** (scott.lacy@mavs.uta.edu). *The ABC's of Property-D Cyclic Neofields*. Preliminary report.

A neofield is a set with two binary operations similar to a field, with the addition not necessarily associative and the multiplication not necessarily commutative. In his seminal paper in 1948 L.J. Paige presented all known results with his own contributions in admissible groups and planar neofields. A.D. Keedwell introduced the notion of Property-D cyclic neofields primarily to explain the non-existence of orthogonal latin squares of order 6. In this survey talk we will examine the conjecture that such neofields exist for all finite orders except for 2 and 6. (Received September 25, 2012)