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2280 S Vine St, Denver, CO 80208. *Bol loops and Bruck loops of order  $pq$* . Preliminary report.

Bruck loops (also known as  $K$ -loops or gyrocommutative gyrogroups) capture algebraic properties of Einstein velocity addition. We present recent results on the classification of Bruck loops of order  $pq$  and, more generally, on Bol loops of order  $pq$ . Most proofs are based on group-theoretical considerations in transitive groups. This is joint work with M. Kinyon and G. Nagy. (Received August 09, 2015)