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1003-05-1254 **Mary Balmes*** (mfrankieb@yahoo.com), 3124 Devonshire Circle, Crown Point, IN 46307, and
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One-Regularity of Cayley Graphs. Preliminary report.

A graph is said to be one-regular if it is arc-transitive and every arc has a trivial stabilizer. The first such graph was found in 1952 by Frucht. His example was cubic. More recently Kwak and Oh found a construction for one-regular graphs of any even valency. Their examples were all Cayley graphs of dihedral groups. In this talk we will consider the problem of finding odd-valency Cayley graphs. We will also show that the question of whether a particular group will yield a one-regular Cayley graph can be related to properties of the group. (Received October 04, 2004)