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Lindsey-Kay Lauderdale* (llauderdale@uttyler.edu), 3900 University Blvd., Tyler, TX 75799, and **Christina Graves** and **Stephen Graves**. *Vertex Minimal Graphs with Dihedral Symmetry*.

Let D_{2n} denote the dihedral group of order $2n$, where n is an integer greater than 3. In this talk we build upon the findings of Haggard and McCarthy who, for certain values of n , each produced a vertex minimal graph whose automorphism group is isomorphic to D_{2n} . Specifically, Haggard considered the situation where $\frac{n}{2}$ or n is a power of a prime number and McCarthy investigated the case when n is not divisible by 2, 3 nor 5. Here we construct a vertex minimal graph whose automorphism group is isomorphic to D_{2n} where n is not divisible by 4. These results provide a new geometric interpretation of the dihedral group. (Received September 20, 2016)