1135-14-2403 **Bradley Weaver*** (brw4sz@virginia.edu), Department of Mathematics, University of Virginia, 141 Cabell Drive, Charlottesville, VA 22904. *The Local Lifting Problem for D_4.*

For a prime p, an algebraically closed field k of characteristic p, a cyclic-by-p group G and a G-extension $L|K$ of complete discrete valuation fields of characteristic p with residue field k, the local lifting problem asks whether the extension $L|K$ lifts to characteristic zero. If every such G-extension $L|K$ lifts to characteristic zero, then G is denominated a local Oort group for k. In this talk we shall motivate the local lifting problem (via the global lifting problem for curves), and discuss briefly why D_4 (the dihedral group of order eight) is a local Oort group for every algebraically closed field of characteristic two. (Received September 26, 2017)