Universal Periods in Quantum Hall Droplets\textsuperscript{1} GREGORY A. FITE, GIL REFAEL, California Institute of Technology, MATTHEW P. A. FISHER, Microsoft Station Q, UCSB — Using the hierarchy picture of the fractional quantum Hall effect, we study the ground state periodicity of a finite size quantum Hall droplet in a quantum Hall fluid of a different filling factor. The droplet edge charge is periodically modulated with flux through the droplet and will lead to a periodic variation in the conductance of a nearby point contact, such as occurs in some quantum Hall interferometers. Our model is consistent with experiment and predicts that superperiods can be observed in geometries where no interfering trajectories occur. The model may also provide an experimentally feasible method of detecting elusive neutral modes and otherwise obtaining information about the microscopic edge structure in fractional quantum Hall states.