1035-Z1-202 Kari Fowler* (kfowler@ut.edu), 401 W. Kennedy Blvd., Tampa, FL 33606. The MacLane Class and the Interaction Between Coefficient Conditions and Solution Conditions of Differential Equations in the Unit Disk. Preliminary report.

The MacLane class consists of nonconstant analytic functions f with asymptotic values at each point of a set of points $A \subset C = \{z : |z| = 1\}$ with A dense on C. In her dissertation, the author investigated the influence of the interaction between the coefficients and solutions of the differential equation $f^{(k)} + A(z)f = 0$, where k is a positive integer. In this presentation we discuss this influence within the context of the MacLane class. (Received August 16, 2007)