Tyler A Russell\* (tyler.russell@ttu.edu), Jennifer Graetz and Steven Deckelman. A Multiplicative Analogue of the Reynolds Operator and Construction of Invariants. Preliminary report.

We explore multiplicative analogue of the Reynolds operator that first arose in CR geometry. Comparisons with the classical Reynolds operator are made in connection with the problem of computing algebra generators in invariant rings over  $\mathbb{C}$ . (Received September 25, 2012)