On maps preserving products equal to fixed elements

Louisa Catalano Union College catalanl@union.edu

Hayden Julius Kent State University hjulius@kent.edu

In this talk, we will characterize the form of bijective linear maps $f : M_n(\mathbb{C}) \to M_n(\mathbb{C})$ satisfying f(A)f(B) = M whenever AB = N, where M and N are fixed $n \times n$ complex matrices.