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**Jennifer Halfpap\*** ([halfpap@mso.unt.edu](mailto:halfpap@mso.unt.edu)). *A New Proof of the Sharp Degree Estimate for Proper Monomial Maps from  $\mathbb{B}_2$  to  $\mathbb{B}_N$* . Preliminary report.

Let  $r: \mathbb{B}_n \rightarrow \mathbb{B}_N$  be a proper rational map between balls in complex Euclidean spaces of different dimensions. It is well-known to CR geometers that the degree of such a map is not arbitrary; it depends on the relationship between the domain and target dimensions. In 2003, D'Angelo, Kos, and Riehl established the sharp degree bound for proper monomial maps from  $\mathbb{B}_2$  to  $\mathbb{B}_N$ . We give a new proof of this result using ideas from commutative algebra. (Received August 19, 2013)