Christopher S. Goodrich* (cgoodrich@mail.uri.edu), University of Rhode Island, Department of Mathematics, 5 Lippitt Road, Kingston, RI 02881. Surprising Properties of Fractional Difference Operators.

In this talk we will begin by providing an introduction to the discrete fractional calculus. We will then provide a few examples, mainly related to the theory of fractional difference equations, to illustrate the many surprising properties of discrete fractional operators. We will conclude by detailing a few open questions regarding the discrete fractional calculus. (Received September 17, 2013)