

Meeting: 1003, Atlanta, Georgia, SS 26A, AMS-SIAM Special Session on Dynamic Equations on Time Scales; Integer Sequences and Rational Maps, I

1003-39-994 **Paul W Eloë*** (Paul.Eloe@notes.udayton.edu), Department of Mathematics, University of Dayton, Dayton, OH 45469-2316. *An Introduction to Discrete Fractional Calculus.*

We study a discrete analogue of the Riemann-Liouville fractional calculus. In this discussion, the time scale is the domain, \mathbb{Z} . We consider basic properties such as a Leibniz formula, and we introduce the concept of a fractional difference equation. This work continues some initial work due to Kenneth S. Miller and Bertram Ross. (Received October 01, 2004)