

1077-03-1464 **Meghan Anderson***, manders@math.harvard.edu. *Linear Equations in Valued D-Fields*.

A D-field is a field endowed with a derivative-like operator obeying a (possibly) twisted Leibniz rule. By introducing a valuation that interacts with the operator in an appropriate way, this setting allows us to consider a difference and a differential field in one structure with good model theoretic properties. We'll look at solutions to linear equations in such structures. (Received September 19, 2011)