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Nate Ackerman* (nate@math.harvard.edu), Mathematics Department, Harvard University, One Oxford Street, Cambridge, MA 02138. *A Fixed Point Theorem for Spherically Complete V-Continuity Spaces.*

In this talk we will present a result which has both the Priess-Crampe and Ribenboim fixed point theorem and the Banach fixed point theorem (for spherically complete spaces) as special cases. Specifically if V is a quantale the notion of a V -continuity space generalizes that of a metric space. We prove an analog of the Banach fixed point theorem which holds for all spherically complete symmetric separated V -continuity spaces. As it has been shown by Flagg that all topological spaces arise as V -continuity spaces our fixed point theorem applies in many more situations than either the Banach fixed point theorem or the Priess-Crampe and Ribenboim fixed point theorem.

If there is time we will also discuss some counterexamples which show that most of our assumptions cannot be weakened. (Received September 07, 2014)