

1106-54-642

**Shaun G. Benvie\*** (sgbenvie@gmail.com), **Owen S. Hill** (oshill193@gmail.com) and **Elizabeth T. Brown** (brownet@jmu.edu). *Partial Metric Spaces: Representation and Classification.*

Partial metrics generalize the standard notion of distance, a metric, to allow for non-zero self-distances. We show how partial metrics can be constructed from standard metrics and vice versa, which gives rise to a useful representation theorem. We also examine partial metric topologies, which are not in general metrizable. We analyze the separation axioms and the properties of sequences and limits in this setting. (Received September 12, 2014)