

Abstract Submitted  
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**Expressing  $n$  dimensions as  $n-1$**  JOHN LAUBENSTEIN, IWPD Research Center — The IWPD Scale Metrics team has explored a different conceptualization of multiple dimensions through a model expressing  $n$  dimensions as  $n - 1$ . This is achieved by aligning time and a spatial dimension along the same orientation. We have shown that time and distance along the same axis in combination with a scalar is equivalent to two orthogonal dimensions. Scale Metrics is simply a different conceptualization of multi-dimensions; however, it requires a change in the modeling of gravitation since time is no longer considered to be orthogonal to the three spatial dimensions. A model for Scale Metrics gravity has been developed and in the process a quantum theory of gravitation emerges. Why entertain IWPD Scale Metrics? Because the Standard Model has not been successful in the unification of GR with QT. A new model of gravitation built on a foundation of quantum concepts (as opposed to a quantum fix to an inherently classical geometric theory) may be of benefit in the ultimate search for the unification of gravitation with quantum theory. Further, since Scale Metrics provides nothing more than a different way to conceptualize multiple dimensions in a manner that is equivalent to 4 vectors – it replaces nothing, but rather serves only to complement past and current achievements while providing a new view of quantum gravitation.

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