

Time Metrology in the Far and Distant Future

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The history of science shows that careful measurements have led to the great revolutions of science. The knowledge that the world was round, the Copernican revolution, and the New Physics of the early 20th century were brought about by careful measurements. The synthesis of Quantum Mechanics and General Relativity is an unsolved problem calling for yet another revolution that will be fueled by metrological advancements. Measurements aiming to fully understand and fully test quantum entanglement may lead to a new view of the fate of our universe, which by today's understanding is doomed to accelerate into a featureless void.