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Violating the Uncertainty Principle: A Review JACOB J. COLLINGS, JEAN-FRANCOIS S. VAN HUELE, Brigham Young University — We review the difference between two uncertainties: the *preparation* uncertainty, which involves states and observables and the *measurement* uncertainty, which also incorporates the evolution implied in a physical measurement process. We explore the proposed concepts of *error* and *disturbance*, which enter the measurement uncertainty and review recent experiments showing evidence for a violation of this *measurement* uncertainty. We examine selected proposed reformulations of the measurement uncertainty relation and evaluate how closely they approach the experimental data.

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