

In anticipation of the redefinition of the kilogram and to avoid a parallel non-SI dissemination system for mass, an alternative approach to mass measurement is being developed at NIST. Magnetic levitation is utilized to create a mass comparison system in which a test mass artifact in air can be directly compared to a standard mass artifact in vacuum using the same high precision comparator balance. To test the feasibility of this project, a levitation system has been constructed.

Institute/Organization: Physical Measurement Laboratory (PML) , National Institute of Standards and Technology (NIST) , USA

Status: Ongoing

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