

Re-evaluation of the NRC-FCs2 Fountain Clock

At the National Research Council Canada, we are re-evaluating the NRC-FCs2 caesium fountain clock. The systematic uncertainty has been dominated by four contributions: cold collisions, the distributed cavity phase (DCP) shift, microwave leakage, and synchronous phase transients. We have significantly reduced all but the DCP shift, which is currently being characterized. We will discuss the methods, results, and impact of the re-evaluation.

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