

Robust Design and Performance of NPL Cs Fountain Clocks

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Atomic fountain clocks have become ubiquitous in maintaining the most stable national time scales within nanoseconds of UTC. After three decades of development, they offer accuracy of about 1 part in 10^{16} . Recent efforts have been aiming at increased reliability and robust commercial design. We present the distinctive design approach and performance of the NPL built fountains, as well as current work to miniaturise the device and prospects for new applications.

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