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The First Isochronous Mass Measurements at CSRe

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**摘要** With the commissioning of the Cooler Storage Ring at the Heavy Ion Research Facility in Lanzhou (HIRFL CSR), a pilot experiment operating the CSRe in isochronous mode to test the power of HIRFL CSR for measuring the mass of the short lived nucleus was performed in December of 2007. The fragments with  $A/q = 2$  of  $^{36}\text{Ar}$  were injected into CSRe and their revolution frequencies were measured with a fast time pick up detector with a thin foil in the circulating path of the ions. The preliminary result is presented. The result shows the potential of CSRe for mass measurements of short lived nuclei.

**关键词** [radiotive ion beam](#) [mass](#) [time of flight](#) [HIRFL CSR](#)

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