

Abstract Submitted  
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**Search for Periodic Rate Variations in XENON100 and Comparison with DAMA/LIBRA Annual Modulation**<sup>1</sup> QING LIN<sup>2</sup>, Columbia Univ, XENON COLLABORATION — Three Scientific runs of XENON100 data accumulated from January 2010 to January 2014 are analyzed to search for electronic recoil event rate modulation signatures. An improved understanding of the detector stability and background has been achieved in this updated analysis. A profile likelihood method, which incorporates the improved detector stability and background model, is used to search for periodical signatures in the XENON100 electronic recoil events. The new results of these studies and a comparison with the DAMA/LIBRA annual modulation will be presented.

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<sup>2</sup>On behalf of XENON collaboratiion

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