

Abstract Submitted  
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**Characterization of the single atom optical trap<sup>1</sup>** CHUNG-YU SHIH, Georgia Institute of Technology, MICHAEL GIBBONS, MICHAEL CHAPMAN, Georgia Institute of Technology — Individually trapped neutral atoms are promising candidate for quantum information processing. It is challenging to characterize the atom trapping environment and atom temperature for single atoms in contrast to many-atom traps. In this work, we are developing new techniques to accurately characterize these important quantities.

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