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Spin squeezing in spin-1 Bose condensates CHRIS HAMLEY, COREY GERVING, THAI HOANG, MICHAEL CHAPMAN, Georgia Institute of Technology — Spin-1 condensates are predicted to generate non-classical states with quantum correlations, specifically spin squeezed states. We investigate these non-classical states experimentally along with a theoretical background to describe them in the single mode approximation. We will report on progress towards observing non-classical states generated by spin mixing using Rb-87 F=1 condensates confined in optical trap.

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