Abstract Submitted
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Spin Relaxation in Superfluid ^{3}He[1] H. KOJIMA, R. MASUTOMI, Rutgers University, K. KIMURA, S. KOBAYASHI, A. YAMAGUCHI, H. ISHIMOTO, ISSP, Tokyo University — The spin relaxation time in superfluid ^{3}He A_1 phase is studied using magnetic fountain pressure techniques. Measurements have been made previously as functions of temperature and pressure. Preliminary measurements will be reported on the dependence of the relaxation time ($0.5 \sim 1.5$ s) on applied magnetic field (H_a) and ^{4}He coverage. At low field range of $0.5 < H_a < 1$ tesla, the spin relaxation time increases linearly with H_a as expected. Unexpectedly, in the $2 < H_a < 8$ tesla range, the relaxation shows little variation. When the interior wall surfaces (including those of heat exchanger) are covered with five layers of ^{4}He, surprisingly, the measured relaxation time decreases.

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