

Cell	T(°C)	X_1	X_2	X_3	X_4	X_{12}/X_{1234}
Simone	215	-0.02(12)	-0.10(14)	-	-	-0.04(12)
	255	0.13(08)	0.08(09)	-	-	0.11(06)
Sosa	160	0.22(07)	0.28(09)	0.32(15)	0.18(09)	0.24(06) [†]
	170	0.24(07)	0.37(15)	-	-	0.27(06)
	180	0.45(08)	0.40(09)	0.50(17)	0.45(09)	0.43(06) [†]
	190	0.59(16)	0.57(17)	-	-	0.58(12)
Boris	235	0.21(14)	0.31(14)	-	-	0.26(10)
Sam.	235	0.08(06)	0.22(09)	-	-	0.12(05)
Alex	235	0.34(09)	0.35(09)	0.63(20)	0.29(10)	0.34(06) [†]
Astral	235	0.15(07)	0.22(10)	0.20(14)	0.14(07)	0.17(05) [†]
Steph.	235	0.31(17)	0.31(10)	-	-	0.31(08)
Brady	235	0.13(07)	0.15(09)	0.23(14)	0.11(07)	0.14(05) [†]
Antoinette	215	0.27(09)	0.44(17)	0.30(19)	0.25(11)	0.28(08) [†]
	235	0.20(09)	0.34(12)	0.36(17)	0.15(09)	0.24(07) [†]
	255	0.55(26)	0.54(16)	0.50(30)	0.56(26)	0.55(13) [†]

Table 1: Shown are the values of the X factor at the indicated over set temperatures. The last column is a weighted average of results from either the first two methods or all four methods. A [†] indicates combined values computed with all 4 methods.

$$P_{pc}(t) = \gamma_{se} P_A t - \frac{1}{2} \gamma_{se} P_A (\gamma_{se} + \Gamma_{pc} + d_{pc}) t^2 \quad (1a)$$

$$P_{tc}(t) = \frac{1}{2} \gamma_{se} P_A d_{tc} t^2 \quad (1b)$$

This is a test:

$$1 - e^{-t \cdot \Gamma_{PNMR}} = 1 - e^{-1 \times \frac{1}{50}} = 0.0198 = 2\% \quad (2)$$

°C

	turns	radius	separation
x	42	33 cm	64 cm
y	100	28 cm	56 cm
z	8	66 cm	66 cm

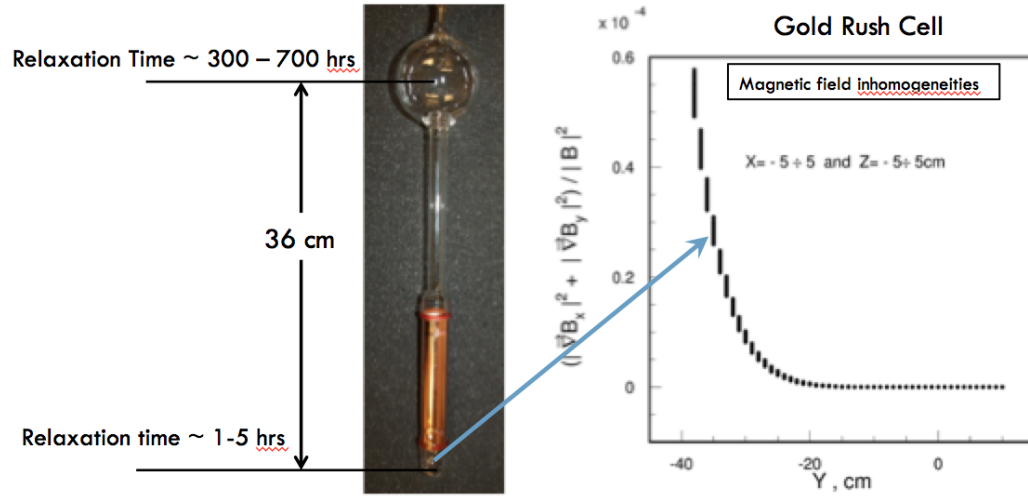


Figure 1: Shown on the right is the inhomogeneities vs. vertical distance from the center of the field. Shown on the left is the cell Goldrush with relaxation time due to field inhomogeneities as displayed on the right.

See in Fig. ??

The energy levels of ^{87}Rb are shown in Fig. ??, where Γ_A is the pressure dependent FWHM, $\Gamma_A \approx 0.04 \text{ nm}/\text{amg} \cdot [^3\text{He}]$.

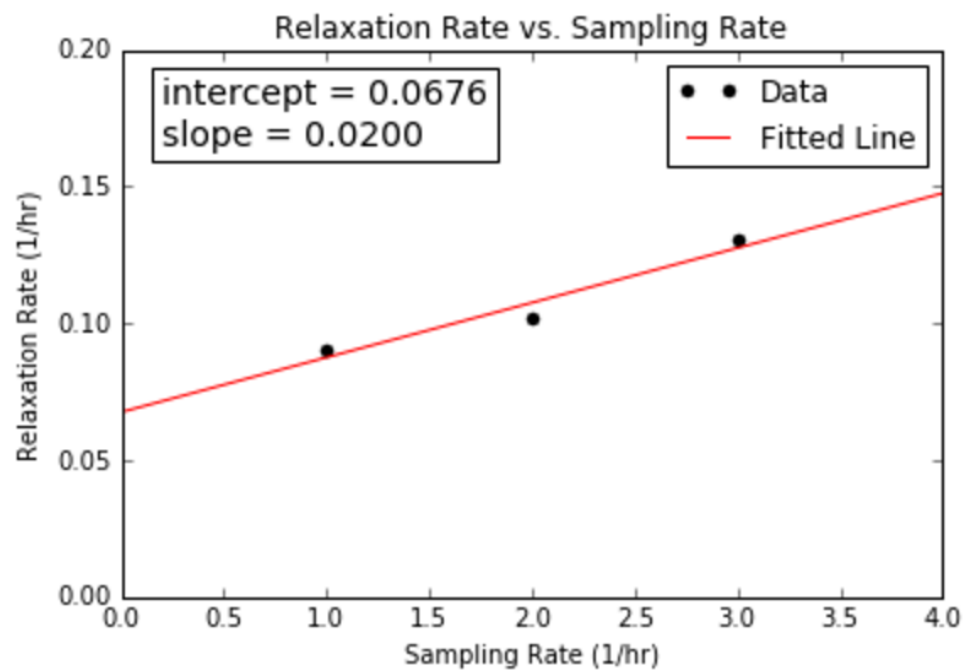


Figure 2: A linear fit to extract lifetime corrected for relaxation due to PNMR losses.

Bibliography