

Polarized ^3He Target Lab Status

Vincent Sulkosky

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Experimental Equipment:

- New Equipment
 - 2 Coherent Diode Lasers (Delivered)
 - Perkin Elmer Lock-in Amplifier (Shipped)
 - Target Lifting Motor (Installed by Al)
 - Oven Controller (Scot Spiegel)
 - New EPR and Spectrum Analyzer setup (Preliminary)
- Equipment Repairs:
 - Kepco 3 LCD malfunction (Repaired)
 - Target Lifting Motor noise when moving (Shipped back)
 - New Coherent laser Interlock fault (Shipped back)

Accomplishments:

- Tested various cells
- Wall Thickness finalized for A1n/g2n cells and Brunhilde
- LabView programming modifications
- Q-Curve studies
- Water calibration 40 cm water cell (February 4, 2002)
- Density studies on Brunhilde (8.66 amagats)

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Future Work

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Things to do:

- Short range plan \sim 2-3 weeks
 - Test New Oven Controller
 - Water Calibrations and Q-curve
 - Transverse Path Alignment
 - Polarization Tests on Duke
 - Vertical Flux Test with Duke
 - Test new EPR setup with Duke
 - Spectrum Analyzer tests with Duke
 - Transverse test with Duke
 - Study EPR-NMR Polarization Discrepancy

- Long range plan \sim few months
 - Density Measurements and fit etalon effect
 - Test New cells