

Polishing and Coating of Test Masses

- Fused Silica

- LIGO I polish close to LIGO II specs (98.5% reflectivity in 2km test)
- Coating absorption: 0.5 ppm (lower with R&D?)

- Sapphire Polishing

- Tests to start ~June
- Key issue: optical homogeneity and compensating polish (hopeful)

- Sapphire Coating

- c-axis absorption: 0.5 ppm
- m-axis absorption: couldn't measure in high-finesse cavity (birefringence?). Need to develop Stanford CPI to look at absorption in coating
- m-axis birefringence: measure soon