**CMM Measurement Plan at LBL**

**Introduction**

These are some notes on the goals and tasks associated with the Survey of the Pixel detector and related support hardware like the prototype fixture.

**Goals**

The goals are:

1. Test-drive and machine and measure actual resolutions
2. Become familiar with the output. Prepare code to manipulate it and transform it to a ‘standard’ format (common to all subsystems)
3. Survey the *Prototype Fixture* and enter it into the Database
4. Build and Survey a prototype Pixel *Sector*. Depending on result decide on best Db-representation scheme. Decide on data density/volume per sector. Assess possible variations until Shell is installed *in-situ* due to transportation/handling.

**Measurements**

In order to achieve the above goals the following measurements are proposed to be performed at LBL some time soon. Please feel free to comment.

1. Survey a flat Silicon disk (300 or 50 um) with the Camera and with the Touch Probe when available. This relates to goals 1) and 2) above.
2. Survey a couple of spherical and rectangular objects several times. This also relates to goals 1) and 2) above.
3. Survey the *Prototype Fixture.* Then, analyze the data and enter it in the Db.
4. Survey a prototype Pixel *Sector*. If possible, simulate transportation/installation stresses/fatigue and re-survey it. Compare outputs, estimate margins and enter the data in the Db