

Introduction to Detector Characterization Sessions

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LIGO Scientific Collaboration Meeting

LIGO Livingston Observatory

March 16, 2000

WELCOME!

Many talks over the next three days:

- **Speakers:** Please keep to your times
- **Questioners:** Discussion may have to be cut off at times
- Many talks mean much activity!

Points to discuss in next three days:

- Revision of task tables
 - Realistic milestone dates
 - Consolidation / assignment of Lead Groups to tasks (?)
 - Revised priorities
- Definition of DMT “Deliverable”
- Distribution of engineering data to groups
(write formal analysis proposal?)
- Participation in analysis of fall 1999 40 Meter data

Detector Characterization W.G. Sessions Agenda

Thursday Afternoon Session (4:15 – 6:30)

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|-----|-----------------------|--|
| 10' | Riles/Sigg (Mich/LHO) | Introduction |
| 20' | Fritschel (LIGO-MIT) | Characterization of the LHO 2-km
Single-Arm IFO |
| 10' | All | Discussion |
| 20' | Sigg (LHO) | The Diagnostics Test and Display Tool |
| 10' | All | Discussion |
| 20' | Zweizig (LIGO-CIT) | Status of the Data Monitoring Tool (DMT) |
| 15' | All | Discussion |
| 10' | Riles (Michigan) | Status of Performance Characterization
DMT Software |
| 5' | All | Discussion |
| 10' | Raab (LHO) | Status of Transient Analysis
DMT Software |
| 5' | All | Discussion |

Detector Characterization W.G. Sessions Agenda

Friday Morning Session (9:00 – 10:15)

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|-----|---------------------|--|
| 20' | Strom (Oregon) | Status of Data Set Reduction and
Experience in HEP Data Sharing
Discussion |
| 5' | All | |
| 15' | Finn (PSU) | Status of Data Set Simulation
Discussion |
| 5' | All | |
| 15' | Yamamoto (LIGO-CIT) | Applications of the End-To-End (E2E)
Model to the LHO 2-km IFO
Discussion |
| 5' | All | |

Detector Characterization W.G. Sessions Agenda

Friday Afternoon Session (1:00 – 3:45)

20'	Ottewill (Dublin)	Line Removal and Porting GRASP to DMT
5'	All	Discussion
10'	Lazzarini (LIGO-CIT)	Bilinear Transformation Analysis
5'	All	Discussion
20'	Schofield (Oregon)	Some Effects of Earthquakes, Temperature, Wind Storms and Barometric Pressure on the Interferometer at Hanford
5'	All	Discussion
20'	Mauceli (Oregon)	Seismic Monitoring at LHO
5'	All	Discussion
15'	Johnson (LSU)	Seismic Data from LLO
5'	All	Discussion
5'	Raab (LHO)	Results on the Gladstone HS Microseismic Monitoring Project
5'	All	Discussion
20'	Daw (LIGO-MIT)	Report on Application of the DMT for Transient Searches and Seismic Data Analysis
5'	All	Discussion
20'	Klimenko (Florida)	Wavelet Analysis & Line Removal
5'	All	Discussion

Detector Characterization W.G. Sessions Agenda

Saturday Morning Session I (8:30 – 10:15)

10' Riles (Michigan)	Operational State and Servo Instability DMT Software
5' All	Discussion
15' Penn (Syracuse)	Optical Sensing Matrices
5' All	Discussion
15' Majid (LIGO-CIT)	Analysis of Fall 1999 40-Meter/TAMA Coincidence
5' All	Discussion
15' Sylvestre (LIGO-MIT)	Transient Analysis and Principal Component Analysis
5' All	Discussion
15' Chassande-Mottin (AEI)	Adaptive Denoising Techniques
5' All	Discussion

Detector Characterization W.G. Sessions Agenda

Saturday Morning Session II (10:45 – 12:00)

15'	Coldwell (Florida)	Violin Mode Analysis
5'	All	Discussion
15'	Whiting (Florida)	Line Removal Techniques
5'	All	Discussion
10'	Greenwood/ (La Tech)	Analysis of LLO Seismic Data
	Simicevic	
5'	All	Discussion
15'	All	A.O.B. (Data distribution proposal)