

Summary of task categories, priorities & active institutions

Task Category	Priority	Institutions
Online Diagnostics & Measurements	1, 3	CIT LSU MIT Mich
Offline Monitoring Infrastr.	1	CIT
Environ. Monitoring (hardware)	1, 2, R	CIT LSU MIT LaTech Oreg PSU
Line Noise Identification	1	AEI ANU Dublin Flor LSU Mich PSU Wisc
Instrumental Correlations	1	Dublin PSU Wisc
Enviromental Correlations	1, R	LSU LaTech Oreg PSU Syr
IFO State Summaries	1, 2, 3	ANU CIT LSU Flor Mich PSU Wisc
IFO-IFO Correlations	3	PSU
Transient ID / Analysis (instr.)	1, 2, 3	AEI IUCAA MIT Mich PSU
Transient ID / Analysis (instr.)	2, 3	CIT Oreg
Time / Frequency Analysis	2, 3	CIT Flor
Data Set Reduction	1, 2	Flor Oreg
Phenomenological Modelling	2	MIT PSU
End-To-End Modelling	1, 2	CIT Flor PSU Pisa

Only institutions with firm task commitments shown in summary table

Priority 1 \equiv Needed at start of 2-km commissioning (10/99)

Priority 2 \equiv Needed during 2-km commissioning (5/00)

Priority 1 \equiv Needed by six months before science run (6/01)

Priority R \equiv Research aread for advanced LIGO

Table 1 – Online Diagnostics / Environmental Monitoring Tasks:

	Due Date	Scientists
Transfer Functions	10/99	Daw Sigg (Finn)
Calibration	10/99	Daw Sigg (Finn)
Optical, RF & Geom. Parameters	10/99	Daw Fritschel Sigg
Diagnostics Control	10/99	Sigg
Whitening Filter	10/99	Fritschel
Analog/Digital Saturation	10/99	McNeil Zweizig
ADC/DAQ Quality Control	10/99	Zweizig
Data Monitor Tool	10/99	Zweizig
Trigger Infrastructure	10/99	Zweizig
Seismic Monitoring (hardware)	10/99	Ashman Coles Daw Gonzalez Greenwood Johnson Rizzi Sigg Simicevic Westbrook
E.M. Field Monitoring (hardware)	5/00	Coles Frey Johnson Schofield
Atmospheric Monitoring (hardware)	5/00	Frey Schofield
Diag. Interp. & Enhancement	6/01	Giaime Gustafson McNeil Johnson
Gravity Gradients (hardware)	Res.	Gonzalez Greenwood Schofield

Scientists in parentheses have expressed interest in task, but have not yet committed to associated deliverable.

Table 2 – Performance Characterization Tasks:

	Due Date	Scientists
Line Noise Sources	10/99	Allen Finn Gustafson Johnson Mukherjee Ottewill Scott Sintes Svoboda Whiting
Seismic Noise	10/99	Gonzalez Greenwood Johnson (Allen Penn)
Stack Vibrations	10/99	Giaime Penn (Riles)
Inter-channel Correlations	10/99	Allen Finn Ottewill (Johnson Mohanty Mukherjee)
Bilinear Cross-couplings	10/99	(Finn)
Operational State	10/99	Gustafson Riles (Klimenko)
Bandlimited RMS	5/00	Zweizig
Time/Freq. Plots	5/00	(Anderson Chassande-Mottin Mohanty Penn)
Non-Gaussian Noise	5/00	Giaime Lazzarini Petrovich Scott Whiting (Riles)
Time-domain System ID	6/01	Finn
2km-4km WA Correlations	6/01	Gonzalez (Penn)
Inter-site Correlated Noise	6/01	Gonzalez (Finn Klimenko Mohanty Mukherjee)
Summary Metrics (astroph)	6/01	Allen Finn (Zotov)
Gravity Gradients	Res.	Gonzalez Greenwood Schofield

Scientists in parentheses have expressed interest in task, but have not yet committed to associated deliverable.

Table 3 – Transient Analysis Tasks:

	Due Date	Scientists
Freq. Band Transients	10/99	Mohanty
Servo Instability	10/99	Riles
Event Catalog	10/99	Weiss
Flickering Optical Modes	5/00	
Impulse Recognition	5/00	Chassande-Mottin Dhurandhar
Magnetic Field Transients	5/00	Frey
Quake Recognition	6/01	Strom
Wind Gusts / Lightning	6/01	Frey
Dust in Beam	6/01	Majid
Wavelet Analysis	6/01	Klimenko
Automated Transient ID	6/01	

Table 4 – Data Set Reduction Tasks:

	Due Date	Scientists
Data Distribution	10/99	Brau Strom
Data Dist. Templates	10/99	Brau Strom
Reduction Algorithms	5/00	Brau Klimenko Strom
Compression Algorithms	5/00	Brau Strom (Zotov)

Scientists in parentheses have expressed interest in task, but have not yet committed to associated deliverable.

Table 5 – Data Set Simulation Tasks:

	Due Date	Scientists
Noise Simulation	5/00	Daw Finn
Signal Superposition	5/00	
End-To-End(E2E) Infrastructure	10/99	Evans Rakhmanov Yamamoto
E2E Time Domain Modal Model	10/99	Bhawal Evans
E2E SEI/SUS System	5/00	Barton Cella Mohanty Rakhmanov Yamamoto
E2E Input Optics	10/99	Klimenko Rakhmanov
E2E Pre-Stabilized Laser	10/99	Bhawal Savage Yamamoto
E2E ISC System	10/99	Evans Yamamoto
E2E Graph. User Interface	10/99	Maros

Breakdown of Task Categories:

Task Category	Table	Tasks Included
Online Diagnostics & Measurements	1	Transfer Functions
	1	Calibration
	1	Optical, RF & Geom. Parameters
	1	Diagnostics Control
	1	Whitening Filter
	1	Analog/Digital Saturation
	1	ADC/DAQ Quality Control
	1	Diag. Interp. & Enhancement
Offline Monitoring Infrastr.	1	Data Monitor Tool
	1	Trigger Infrastructure
Environ. Monitoring (hardware)	1	Seismic Monitoring (hardware)
	1	E.M. Field Monitoring (hardware)
	1	Atmospheric Monitoring (hardware)
	1	Gravity Gradients (hardware)
Line Noise Identification	2	Line Noise Sources
Instrumental Correlations	2	Inter-channel Correlations
	2	Bilinear Cross-couplings
Enviromental Correlations	2	Seismic Noise
	2	Stack Vibrations
	2	Gravity Gradients
IFO State Summaries	2	Operational State
	2	Non-Gaussian Noise
	2	Time-domain System ID
	2	Summary Metrics (astroph)
IFO-IFO Correlations	2	2km-4km WA Correlations
	2	Inter-site Correlated Noise

Breakdown of Task Categories:

Task Category	Table	Tasks Included
Transient ID / Analysis (instr.)	3	Freq. Band Transients
	3	Servo Instability
	3	Event Catalog
	3	Flickering Optical Modes
	3	Impulse Recognition
	3	Automated Transient ID
Transient ID / Analysis (instr.)	3	Magnetic Field Transients
	3	Quake Recognition
	3	Wind Gusts / Lightning
	3	Dust in Beam
Time / Frequency Analysis	2	Bandlimited RMS
	2	Time/Freq. Plots
	3	Wavelet Analysis
Data Set Reduction	4	Data Distribution
	4	Data Dist. Templates
	4	Reduction Algorithms
	4	Compression Algorithms
Phenomenological Modelling	5	Noise Simulation
	5	Signal Superposition
End-To-End Modelling	5	End-To-End(E2E) Infrastructure
	5	E2E Time Domain Modal Model
	5	E2E SEI/SUS System
	5	E2E Input Optics
	5	E2E Pre-Stabilized Laser
	5	E2E ISC System
	5	E2E Graph. User Interface