WATCHMAN Collaboration Meeting 2019



Report of Contributions

Contribution ID: 6 Type: **not specified**

Project and Meeting Overview

Friday, January 11, 2019 8:30 AM (30 minutes)

Primary author: BERNSTEN, Adam

Presenter: BERNSTEN, Adam

Session Classification: Full Collaboration Meeting

Contribution ID: 7 Type: **not specified**

Project Management Overview - Subsystem Leads and CDR process

Friday, January 11, 2019 9:00 AM (25 minutes)

Primary author: HILLS, Rob

Presenter: HILLS, Rob

Session Classification: Full Collaboration Meeting

Contribution ID: 8 Type: not specified

Reference Detector Design

Friday, January 11, 2019 9:25 AM (25 minutes)

Primary author: MAUGER, Chris

Presenter: MAUGER, Chris

Session Classification: Full Collaboration Meeting

Contribution ID: 9 Type: not specified

Boulby Site Update

Friday, January 11, 2019 9:50 AM (20 minutes)

Primary author: PALING, Sean (Boulby Underground Science Facility)

Presenter: PALING, Sean (Boulby Underground Science Facility)

Session Classification: Full Collaboration Meeting

Contribution ID: 10 Type: not specified

AWE Status Update

Friday, January 11, 2019 10:10 AM (20 minutes)

Primary author: BURNS, Jon (AWE plc)

Presenter: BURNS, Jon (AWE plc)

Session Classification: Full Collaboration Meeting

Contribution ID: 11 Type: not specified

U.S. Academic Status

Friday, January 11, 2019 10:50 AM (20 minutes)

Presenter: VAGINS, Mark

Session Classification: Full Collaboration Meeting

Contribution ID: 12 Type: not specified

U.K. Academic Status

Friday, January 11, 2019 11:10 AM (20 minutes)

Presenter: MALEK, Matthew

Session Classification: Full Collaboration Meeting

Contribution ID: 13 Type: not specified

Analysis overview and sensitivity goals

Friday, January 11, 2019 1:00 PM (30 minutes)

Primary author: Dr BERGEVIN, Marc (LLNL)

Presenter: Dr BERGEVIN, Marc (LLNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 14 Type: not specified

Blind analysis for on/off cycle observation

Friday, January 11, 2019 1:30 PM (20 minutes)

Primary author: GRIBBLE, Jeremy

Presenter: GRIBBLE, Jeremy

Session Classification: Full Collaboration Meeting

Contribution ID: 15 Type: not specified

Unblind analysis for on/off cycle observation

Friday, January 11, 2019 1:50 PM (20 minutes)

Presenter: PERSHING, Teal

Session Classification: Full Collaboration Meeting

Contribution ID: 16 Type: not specified

Initial study of extrapolation to large detectors/long standoff

Friday, January 11, 2019 2:10 PM (20 minutes)

Primary author: Dr LI, Viacheslav (LLNL)

Presenter: Dr LI, Viacheslav (LLNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 17 Type: not specified

Effect of systematics on on/off cycle observation

Friday, January 11, 2019 2:30 PM (20 minutes)

Primary author: Ms KNEALE, Elisabeth (University of Sheffield)

Presenter: Ms KNEALE, Elisabeth (University of Sheffield)

Session Classification: Full Collaboration Meeting

Contribution ID: 18 Type: not specified

Nudar @ WATCHMAN

Friday, January 11, 2019 2:50 PM (25 minutes)

Presenter: LEARNED, John (University of Hawaii)

Session Classification: Full Collaboration Meeting

Contribution ID: 19 Type: not specified

Nonproliferation Treaties Overview and context (remote presentation)

Friday, January 11, 2019 3:30 PM (30 minutes)

Presenter: DALNOKI-VERESS, Ferenc

Session Classification: Full Collaboration Meeting

Discussion

Contribution ID: 20 Type: not specified

Discussion

Friday, January 11, 2019 4:30 PM (30 minutes)

Full Collaboration

Session Classification: Full Collaboration Meeting

Contribution ID: 21 Type: not specified

The WATCHMAN Logo

if available

Session Classification: Full Collaboration Meeting

Contribution ID: 23 Type: not specified

CDR Overview

Saturday, January 12, 2019 8:30 AM (45 minutes)

Primary author: HILLS, Rob (LLNL)

Presenter: HILLS, Rob (LLNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 24 Type: not specified

Detector Integration

Contribution ID: 25 Type: not specified

Test Program

Saturday, January 12, 2019 9:15 AM (30 minutes)

Primary author: Mr PAPATYI, Tony (PNNL)

Presenter: Mr PAPATYI, Tony (PNNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 26 Type: not specified

Cleanliness Program

Friday, January 11, 2019 4:00 PM (30 minutes)

Primary author: DYE, Stephen (Hawaii Pacific Univesity)

Presenter: DYE, Stephen (Hawaii Pacific Univesity)

Session Classification: Full Collaboration Meeting

Contribution ID: 27 Type: not specified

Calibration Program Overview

Saturday, January 12, 2019 10:00 AM (10 minutes)

Primary authors: MAUGER, Chris; Dr DAZELEY, Steve (LLNL)

Presenters: MAUGER, Chris; Dr DAZELEY, Steve (LLNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 28 Type: not specified

Site

Saturday, January 12, 2019 11:00 AM (30 minutes)

Presenter: BURNS, Jon

Session Classification: Full Collaboration Meeting

Tank

Contribution ID: 29 Type: not specified

Tank

Saturday, January 12, 2019 1:15 PM (30 minutes)

Primary author: SPOONER, Neil (University of Sheffield)

Presenter: SPOONER, Neil (University of Sheffield)

Session Classification: Full Collaboration Meeting

Contribution ID: 30 Type: not specified

PMTs

Saturday, January 12, 2019 1:45 PM (30 minutes)

Primary author: SVOBODA, Robert (UC Davis)

Presenter: SVOBODA, Robert (UC Davis)

Session Classification: Full Collaboration Meeting

DAQ

Contribution ID: 31 Type: not specified

DAQ

Saturday, January 12, 2019 2:15 PM (30 minutes)

Primary author: COWEN, Doug (Penn State)

Presenter: COWEN, Doug (Penn State)

Session Classification: Full Collaboration Meeting

Contribution ID: 32 Type: not specified

REBAM

Saturday, January 12, 2019 2:45 PM (30 minutes)

Primary authors: MAUGER, Chris; BARROS, Nuno (University of Pennsylvania)

Presenters: MAUGER, Chris; BARROS, Nuno (University of Pennsylvania)

Session Classification: Full Collaboration Meeting

Contribution ID: 33 Type: not specified

HV

Saturday, January 12, 2019 3:30 PM (30 minutes)

Primary author: GRANT, Chris (Boston University)

Presenter: GRANT, Chris (Boston University)

Session Classification: Full Collaboration Meeting

Contribution ID: 34 Type: not specified

Water System

Saturday, January 12, 2019 4:00 PM (30 minutes)

Primary author: VAGINS, Mark

Presenter: VAGINS, Mark

Session Classification: Full Collaboration Meeting

Contribution ID: 35 Type: not specified

Simulations Overview

Saturday, January 12, 2019 4:30 PM (15 minutes)

Primary author: BERGEVIN, Marc

Presenter: BERGEVIN, Marc

Session Classification: Full Collaboration Meeting

Contribution ID: 36 Type: not specified

Future R & D

Sunday, January 13, 2019 8:30 AM (30 minutes)

Primary authors: GRANT, Chris (Boston University); Dr MALEK, Matthew (University of Sheffield

Presenters: GRANT, Chris (Boston University); Dr MALEK, Matthew (University of Sheffield

Session Classification: Full Collaboration Meeting

Discussion

Contribution ID: 37 Type: not specified

Discussion

Sunday, January 13, 2019 9:00 AM (1 hour)

Session Classification: Full Collaboration Meeting

Contribution ID: 38 Type: not specified

Publications Board

Sunday, January 13, 2019 10:15 AM (15 minutes)

Primary author: Prof. GANN, Gabriel Orebi (UC Berkeley / LBNL)

Presenter: Prof. GANN, Gabriel Orebi (UC Berkeley / LBNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 39 Type: not specified

Conceptual Design Paper

Sunday, January 13, 2019 10:30 AM (10 minutes)

Primary authors: Prof. VAGINS, Mark (UC Irvine); SPOONER, Neil (University of Sheffield)

Presenters: Prof. VAGINS, Mark (UC Irvine); SPOONER, Neil (University of Sheffield)

Session Classification: Full Collaboration Meeting

Contribution ID: 40 Type: not specified

Speakers Board

Sunday, January 13, 2019 10:40 AM (20 minutes)

Presenter: DALNOKI-VERESS, Ferenc

Session Classification: Full Collaboration Meeting

Contribution ID: 41 Type: not specified

Main Meeting Summary and Next Steps

Sunday, January 13, 2019 11:00 AM (25 minutes)

Primary author: Dr BERNSTEN, Adam (Lawrence Livermore National Laboratory)

Presenter: Dr BERNSTEN, Adam (Lawrence Livermore National Laboratory)

Session Classification: Full Collaboration Meeting

Contribution ID: 42 Type: not specified

Discussion and Main Meeting Closeout

Sunday, January 13, 2019 11:25 AM (1h 5m)

Full Collaboration

Session Classification: Full Collaboration Meeting

Contribution ID: 43 Type: not specified

Institutional Board Meeting

Sunday, January 13, 2019 1:30 PM (1h 30m)

Jon Burns lead

Primary author: BURNS, Jon

Presenter: BURNS, Jon

Session Classification: Full Collaboration Meeting

Contribution ID: 44 Type: **not specified**

Subsystem Lead Meeting

Sunday, January 13, 2019 3:15 PM (1 hour)

Rob Hills lead

Primary author: HILLS, Rob

Presenter: HILLS, Rob

Session Classification: Full Collaboration Meeting

Contribution ID: 45 Type: not specified

Results from 2018 Testing

Thursday, January 10, 2019 8:00 AM (45 minutes)

Primary author: SMITH, Gary (University of Edinburgh)

Presenter: SMITH, Gary (University of Edinburgh)

Session Classification: PMT WG

Contribution ID: 46 Type: not specified

Review of PMT LA vrs SA Sensitivity and Requirements

Thursday, January 10, 2019 8:45 AM (45 minutes)

Session Classification: PMT WG

Contribution ID: 47 Type: **not specified**

PMT Cost and Schedule, LA vrs SA

Thursday, January 10, 2019 9:50 AM (30 minutes)

Session Classification: PMT WG

Contribution ID: 48 Type: not specified

PMT Mechanical Testing Program

Thursday, January 10, 2019 10:20 AM (40 minutes)

Session Classification: PMT WG

Acrylic Covers

Contribution ID: 49 Type: not specified

Acrylic Covers

Thursday, January 10, 2019 12:00 PM (1 hour)

Do we need them? What are the effects?

Session Classification: PMT WG

Contribution ID: 50 Type: not specified

Other costs: DAQ/HV/Mounting/Assembly

Thursday, January 10, 2019 1:00 PM (1 hour)

Session Classification: PMT WG

Contribution ID: 51 Type: not specified

Walk through testing and installation steps (with updated info)

Thursday, January 10, 2019 2:20 PM (1h 40m)

Need to produce preliminary plan for CDR

Session Classification: PMT WG

 $\begin{tabular}{ll} WATCHMAN\ C\ ... & /\ Report\ of\ Contributions \end{tabular}$

System Status Reports

Contribution ID: 52 Type: not specified

System Status Reports

Session Classification: DAQ WG

CAEN

Contribution ID: 53 Type: not specified

CAEN

Thursday, January 10, 2019 8:00 AM (30 minutes)

Session Classification: DAQ WG

ANNIE/KOTO

Contribution ID: 54 Type: not specified

ANNIE/KOTO

Thursday, January 10, 2019 8:30 AM (30 minutes)

Session Classification: DAQ WG

TARGET

Contribution ID: 55 Type: not specified

TARGET

Thursday, January 10, 2019 9:00 AM (30 minutes)

Session Classification: DAQ WG

Contribution ID: 56 Type: not specified

Purpose of CDR/PDR

Thursday, January 10, 2019 10:00 AM (15 minutes)

Session Classification: DAQ WG

Contribution ID: 57 Type: not specified

CDR: known system risks, challenges

Thursday, January 10, 2019 10:15 AM (30 minutes)

Session Classification: DAQ WG

Contribution ID: 58 Type: not specified

PDR: Common and specific performance milestones & schedule; re-evaluate requirements

Thursday, January 10, 2019 10:45 AM (1h 15m)

Session Classification: DAQ WG

Contribution ID: 59 Type: not specified

PDR: Test procedures, performance criteria

Thursday, January 10, 2019 1:00 PM (30 minutes)

Session Classification: DAQ WG

Contribution ID: 60 Type: not specified

PDR: System bandwidths (define assumed compression factors)

Thursday, January 10, 2019 1:30 PM (15 minutes)

Session Classification: DAQ WG

Contribution ID: 61 Type: not specified

PDR: Cost estimation (define DAQ HW boundary)

Thursday, January 10, 2019 1:45 PM (15 minutes)

Session Classification: DAQ WG

Contribution ID: 62 Type: not specified

Interfaces of DAQ with other systems

Thursday, January 10, 2019 2:00 PM (30 minutes)

Session Classification: DAQ WG

Contribution ID: 63 Type: not specified

Interfaces (jointly with HV, REBAM, Site...)

Thursday, January 10, 2019 3:00 PM (1 hour)

Session Classification: DAQ WG

Discussion

Contribution ID: 64 Type: not specified

Discussion

Friday, January 11, 2019 11:30 AM (30 minutes)

Session Classification: Full Collaboration Meeting

Contribution ID: 65 Type: not specified

AmBe/DT source studies

Saturday, January 12, 2019 10:30 AM (15 minutes)

Primary author: Dr ASKINS, Morgan (U. Berkeley)

Presenter: Dr ASKINS, Morgan (U. Berkeley)

Session Classification: Full Collaboration Meeting

Contribution ID: 66 Type: not specified

Systematic Uncertainties in Background

Saturday, January 12, 2019 10:45 AM (15 minutes)

Primary author: KNEALE, Liz

Presenter: KNEALE, Liz

Session Classification: Full Collaboration Meeting

Contribution ID: 67 Type: not specified

Muon veto study

Saturday, January 12, 2019 4:45 PM (15 minutes)

Primary author: AKINDELE, Tomi (LLNL)

Presenter: AKINDELE, Tomi (LLNL)

Session Classification: Full Collaboration Meeting

Contribution ID: 68 Type: not specified

SuperK benchmarking, WATCHMAN reconstruction and performance optimization

Saturday, January 12, 2019 5:00 PM (20 minutes)

Primary author: Dr SMY, Michael

Presenter: Dr SMY, Michael

Session Classification: Full Collaboration Meeting

Contribution ID: 69 Type: not specified

PMT tilt study

Saturday, January 12, 2019 5:20 PM (15 minutes)

Primary author: Mr PERSHING, Teal (UC Davis)

Presenter: Mr PERSHING, Teal (UC Davis)

Session Classification: Full Collaboration Meeting

Contribution ID: 70 Type: not specified

US-UK Project Coordination

Integrated Project Team

Session Classification: Full Collaboration Meeting

Contribution ID: 71 Type: not specified

Light Injection System

Saturday, January 12, 2019 10:10 AM (10 minutes)

remote

Primary author: METELKO, Carl

Presenter: METELKO, Carl

Session Classification: Full Collaboration Meeting

Contribution ID: 72 Type: not specified

2-ton detector at Sheffield for calibration

Saturday, January 12, 2019 10:20 AM (10 minutes)

Primary author: Dr MALEK, Matthew (University of Sheffield)

Presenter: Dr MALEK, Matthew (University of Sheffield)

Session Classification: Full Collaboration Meeting

Contribution ID: 73 Type: not specified

Collaboration Photograph

Saturday, January 12, 2019 11:30 AM (15 minutes)

Session Classification: Full Collaboration Meeting