

# Theia workshop



## Report of Contributions

Contribution ID: 5

Type: **not specified**

## Welcome, Goals of workshop

Contribution ID: 6

Type: **not specified**

## Theia Overview - Josh Klein, Penn

*Thursday 12 April 2018 09:10 (40 minutes)*

**Session Classification:** Path to THEIA

Contribution ID: 7

Type: **not specified**

## Theia Detector Concept

**Session Classification:** Path to THEIA

Contribution ID: 8

Type: **not specified**

## **ANNIE Science Overview: Matt Wetstein, Iowa State**

*Thursday 12 April 2018 09:50 (20 minutes)*

**Session Classification:** Path to THEIA

Contribution ID: 9

Type: **not specified**

## **WATCHMAN Science Overview: Adam Bernstein, LLNL**

*Thursday 12 April 2018 10:10 (20 minutes)*

**Session Classification:** Path to THEIA

Contribution ID: **10**

Type: **not specified**

## **Opportunities for the AIT at Boulby Underground Lab**

**Session Classification:** Path to THEIA

Contribution ID: 11

Type: **not specified**

## **Sanford Underground Research Facility –Status report on the LBNF Project: David Vardiman, SURF**

*Thursday 12 April 2018 10:50 (30 minutes)*

**Session Classification:** Path to THEIA



Contribution ID: 12

Type: **not specified**

## **Discussion: Opportunity for THEIA at LBNF: Robert Svoboda, UC Davis**

*Thursday 12 April 2018 11:20 (20 minutes)*

**Session Classification:** Path to THEIA

Contribution ID: 13

Type: **not specified**

## **Discussion of the path to Theia: Michi Wurm, Univ. of Mainz**

*Thursday 12 April 2018 11:40 (30 minutes)*

**Session Classification:** Path to THEIA

Contribution ID: 14

Type: **not specified**

## Overview of R&D Requirements for THEIA

**Session Classification:** Common R&D

Contribution ID: 15

Type: **not specified**

## ANNIE Run 2 Simulations

**Session Classification:** Common R&D

Contribution ID: 16

Type: **not specified**

## **Overview of WATCHMAN R&D Relevant to THEIA: Matthew Malek, Sheffield**

*Thursday 12 April 2018 13:20 (25 minutes)*

**Session Classification:** Common R&D

Contribution ID: 17

Type: **not specified**

## **Overview of ANNIE R&D Relevant for THEIA: Jonathan Eisch, Iowa State**

*Thursday 12 April 2018 14:05 (25 minutes)*

**Session Classification:** Common R&D

Contribution ID: **18**

Type: **not specified**

## **Discussion of common simulation package**

**Session Classification:** Common R&D

Contribution ID: 19

Type: **not specified**

## **Super-Kamiokande Gd doping: Mark Vagins, UC Irvine/IPMU**

*Thursday 12 April 2018 15:20 (20 minutes)*

**Session Classification:** Common R&D



Contribution ID: 20

Type: **not specified**

## **Directionality in Liquid Scintillator: Bjoern Worsak, Hamburg**

*Thursday 12 April 2018 15:40 (20 minutes)*

**Session Classification:** Common R&D

Contribution ID: **21**

Type: **not specified**

## Multi-PMTs

**Session Classification:** Common R&D

Contribution ID: 22

Type: **not specified**

## **ANNIE Reconstuction using LAPPDs: Jingbo Wang, UC Davis**

*Thursday 12 April 2018 16:40 (20 minutes)*

**Session Classification:** Common R&D

Contribution ID: 23

Type: **not specified**

## **PMT production rates, glass, and strength: Robert Svoboda, UC Davis**

*Thursday 12 April 2018 17:00 (30 minutes)*

**Session Classification:** Common R&D

Contribution ID: 24

Type: **not specified**

## **Techniques and Issues in Gd Water Doping: Vincent Fischer, UC Davis**

*Friday 13 April 2018 09:00 (20 minutes)*

**Session Classification:** Common R&D

Contribution ID: 25

Type: **not specified**

## **WbLS Development, Production, and Purification: Minfang Yeh, BNL**

*Friday 13 April 2018 09:20 (40 minutes)*

**Session Classification:** Common R&D

Contribution ID: 26

Type: **not specified**

## Te-loading in SNO+: Szymon Manecki, Queens University

*Friday 13 April 2018 10:00 (30 minutes)*

**Session Classification:** Common R&D

Contribution ID: 27

Type: **not specified**

## Discussion of forming a common database

**Session Classification:** Common R&D



Contribution ID: **28**

Type: **not specified**

## **LAPPD characterization: Matt Wetstein, Iowa State**

*Friday 13 April 2018 11:20 (30 minutes)*

**Session Classification:** Common R&D

Contribution ID: 29

Type: **not specified**

## **PMT glass issues in WATCHMAN**

**Session Classification:** Common R&D

Contribution ID: **30**

Type: **not specified**

## **LAPPD Production: Evan Angelico, Univ. of Chicago**

*Friday 13 April 2018 11:50 (30 minutes)*

**Session Classification:** Common R&D

Contribution ID: 31

Type: **not specified**

## **International Perspectives: Canada, Finland, Germany, UK, USA**

*Saturday 14 April 2018 09:00 (45 minutes)*

**Session Classification:** Discussions

Contribution ID: 32

Type: **not specified**

## Discussion of Common R&D and Proposals

*Saturday 14 April 2018 09:45 (45 minutes)*

**Session Classification:** Discussions

Contribution ID: 33

Type: **not specified**

## **ANNIE Phase 3 with WbLS and more LAPPDs**

**Session Classification:** Discussions

Contribution ID: 34

Type: **not specified**

## LAPPDs for WATCHMAN

**Session Classification:** Discussions

Contribution ID: 35

Type: **not specified**

## Theia Cavern site study

**Session Classification:** Discussions



Contribution ID: 36

Type: **not specified**

## Discussion

*Thursday 12 April 2018 14:45 (15 minutes)*

**Session Classification:** Common R&D

Contribution ID: 37

Type: **not specified**

## **PMT production rates**

**Session Classification:** Common R&D

Contribution ID: **38**

Type: **not specified**

## **Long baseline white paper results - Mike Wilking**

*Friday 13 April 2018 14:25 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 39

Type: **not specified**

## Long baseline results discussion

*Friday 13 April 2018 14:45 (15 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 40

Type: **not specified**

## NLDBD white paper results - Valentina, Lindley

*Friday 13 April 2018 13:30 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 41

Type: **not specified**

## NLDBD results discussion

*Friday 13 April 2018 14:05 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 42

Type: **not specified**

## **Solar neutrino white paper results - Richie Bonventre**

*Friday 13 April 2018 15:20 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 43

Type: **not specified**

## **Solar neutrino results discussion**

*Friday 13 April 2018 15:40 (25 minutes)*

**Session Classification:** Theia White Paper Discussions



Contribution ID: 44

Type: **not specified**

## **Anti-neutrino white paper results: Steve Dye, UH Manoa**

*Friday 13 April 2018 16:05 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 45

Type: **not specified**

## Anti-neutrino results discussion

*Friday 13 April 2018 16:25 (25 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 46

Type: **not specified**

## Other physics topics - discussion

*Friday 13 April 2018 16:50 (20 minutes)*

**Session Classification:** Theia White Paper Discussions

Contribution ID: 47

Type: **not specified**

## **Archimedes and Honey Bees: Design considerations for large monolithic detectors: Steve Dye, Univ. of Hawaii, Manoa**

*Thursday 12 April 2018 14:30 (15 minutes)*

**Session Classification:** Common R&D

Contribution ID: 48

Type: **not specified**

## **Latest Results From Chess: Javi Caravaca, UC Berkeley**

*Friday 13 April 2018 10:50 (30 minutes)*

**Session Classification:** Common R&D

Contribution ID: 49

Type: **not specified**

## **Advanced Instrumentation Testbed: Sean Paling, Boulby Underground Lab**

*Thursday 12 April 2018 13:45 (20 minutes)*

**Session Classification:** Common R&D

Contribution ID: 50

Type: **not specified**

## High Energy Event Reconstruction: Leon Pickard, UC Davis

*Thursday 12 April 2018 16:00 (20 minutes)*

**Session Classification:** Common R&D

Contribution ID: 51

Type: **not specified**

## **NLDBD with machine learning: Andrey Elagin**

*Friday 13 April 2018 13:50 (15 minutes)*

**Session Classification:** Theia White Paper Discussions



Contribution ID: 52

Type: **not specified**

## **Low-energy directional reconstruction: Johann, U Mainz**

*Thursday 12 April 2018 16:20 (20 minutes)*

**Session Classification:** Common R&D