

The TRIDENT Winter Collaboration Meeting of 2025

Report of Contributions

Contribution ID: **94**

Type: **not specified**

Welcome & Project Overview

Speaker: Donglian XU

Contribution ID: 95

Type: **not specified**

Welcome & Project Overview

Speaker: Donglian XU

Contribution ID: 96

Type: **not specified**

Recent progress on the development of Trident SPIDER

Contribution ID: 97

Type: **not specified**

Recent progress on floating power buoy design

Thursday, 20 November 2025 10:00 (30 minutes)

Presenter: ZHANG, Xiantao

Session Classification: Ocean Engineering

Contribution ID: 98

Type: **not specified**

Recent progress on floating power buoy design

Presenter: ZHANG, Xiantao

Session Classification: Ocean Engineering

Contribution ID: 99

Type: **not specified**

A web-based construction method of deepsea neutrino telescope

Thursday, 20 November 2025 11:00 (30 minutes)

Presenter: TIAN, Xinliang (Shanghai Jiao Tong University)

Session Classification: Ocean Engineering

Contribution ID: **100**

Type: **not specified**

Aging research on vertical dynamic cable

Thursday, 20 November 2025 11:30 (30 minutes)

Presenter: LIU, Fei

Session Classification: Ocean Engineering

Contribution ID: **101**

Type: **not specified**

Single string overview

Presenter: MEI, Hualin

Session Classification: Ocean Engineering

Contribution ID: **102**

Type: **not specified**

Status on TRIDENT timing system

Presenter: GUO, Gunghua

Session Classification: Ocean Engineering

Contribution ID: **103**

Type: **not specified**

Status on data acquisition software

Presenter: WAN, Peng

Session Classification: Ocean Engineering

Contribution ID: **104**

Type: **not specified**

Data Monitor Status

Presenter: ZHU, Yiwei

Session Classification: Ocean Engineering

Contribution ID: **105**

Type: **not specified**

single string joint test

Presenter: WU, peilian (sjtu)

Session Classification: Ocean Engineering

Contribution ID: **106**

Type: **not specified**

PMT test progress

Presenter: SHAO, Hengbin

Session Classification: Ocean Engineering

Contribution ID: **107**

Type: **not specified**

Progress on PMT base with HV boosting

Presenter: WEI, Zhi

Session Classification: Ocean Engineering

Contribution ID: **108**

Type: **not specified**

Progress on SiPM readout electronics

Presenter: ZHI, Wei

Session Classification: Ocean Engineering

Contribution ID: **109**

Type: **not specified**

A 16-Channel Fast-timing ASIC for Large-area SiPM Arrays Readout in the TRIDENT Experiment

Presenter: WANG, Mingxin

Session Classification: Ocean Engineering

Contribution ID: **110**

Type: **not specified**

Tracing solar modulation thorough Ice Cherenkov Observations and Yield Function Analysis

Presenter: NUNTIYAKUL, Waraporn

Session Classification: Neutrino physics&astronomy

Contribution ID: 111

Type: **not specified**

Modeling Cosmic Rays from the Atmosphere to Interplanetary Space

Presenter: SERIPIENLERT (KIM), Achara

Session Classification: Neutrino physics&astronomy

Contribution ID: **112**

Type: **not specified**

TRIDENT Simulation Overview

Presenter: MORTON-BLAKE, Iwan (Tsung-Dao Lee Institute / Shanghai Jiao Tong University)

Session Classification: Neutrino physics&astronomy

Contribution ID: 113

Type: **not specified**

Detecting the Next Galactic Core-Collapse Supernova with TRIDENT

Presenter: CAO, Ruike (SJTU)

Session Classification: Neutrino physics&astronomy

Contribution ID: 114

Type: **not specified**

Projected DM detection sensitivity

Presenter: WANG, Yingwei

Session Classification: Neutrino physics&astronomy

Contribution ID: **115**

Type: **not specified**

Progress on CORSIKA8

speaker: CORSIKA8

Session Classification: Neutrino physics&astronomy

Contribution ID: **116**

Type: **not specified**

TREX2024 mDOM Analysis

Presenter: ZHANG, Fuyudi

Session Classification: Electronics&DAQ

Contribution ID: **117**

Type: **not specified**

TREX2024 Camera Analysis

Presenter: ZHANG, haoyan (李政道研究所)

Session Classification: Electronics&DAQ

Contribution ID: **118**

Type: **not specified**

Energy Reconstruction

Presenter: HUANG, Jingtao (上海交通大学李政道研究所)

Session Classification: Electronics&DAQ

Contribution ID: **119**

Type: **not specified**

Track–Cascade Event Classification Method Based on Time Information

Presenter: CAO, Yaoqi

Session Classification: Electronics&DAQ

Contribution ID: **120**

Type: **not specified**

Cascade reconstruction in phase 1

Session Classification: Electronics&DAQ

Contribution ID: **121**

Type: **not specified**

4 inch PMT DOM sim

Presenter: SHAO, Hengbin

Session Classification: Electronics&DAQ

Contribution ID: **122**

Type: **not specified**

DOM Radioactivity Measurement and Sim

Presenter: LIU, Shasha

Session Classification: Electronics&DAQ

Contribution ID: **123**

Type: **not specified**

Gel Pad R&D

Presenter: LIU, Jiexi

Session Classification: Electronics&DAQ

Contribution ID: **124**

Type: **not specified**

Calibration Overview

Presenter: ZHU, Tailin (TDLI)

Session Classification: Detector simulation&reconstruction

Contribution ID: 125

Type: **not specified**

Optical Calibration

Presenter: ZHANG, haoyan (李政道研究所)

Session Classification: Detector simulation&reconstruction

Contribution ID: **126**

Type: **not specified**

Time Calibration

Presenter: ZHANG, Zhaozhi

Session Classification: Detector simulation&reconstruction

Contribution ID: **127**

Type: **not specified**

Bioluminescence

Presenter: ZHU, Tailin (TDLI)

Session Classification: Detector simulation&reconstruction

Contribution ID: **128**

Type: **not specified**

APS and sound speed profile

Presenter: CHENG, Jingguang

Session Classification: Detector simulation&reconstruction

Contribution ID: **129**

Type: **not specified**

Bioluminescence

Presenter: ZHU, Tailin (TDLI)

Session Classification: Detector simulation&reconstruction

Contribution ID: **130**

Type: **not specified**

Bioluminescence

Presenter: ZHU, Tailin (TDLI)

Session Classification: Detector simulation&reconstruction

Contribution ID: **131**

Type: **not specified**

APS and sound speed profile

Presenter: CHENG, Jingguang

Session Classification: Detector simulation&reconstruction

Contribution ID: 133

Type: **not specified**

Recent progress on the development of Trident SPIDER

Thursday, 20 November 2025 09:30 (30 minutes)

Presenter: GUO, Xiaoxian

Session Classification: Ocean Engineering

Contribution ID: **134**

Type: **not specified**

Single string overview

Thursday, 20 November 2025 13:30 (30 minutes)

Presenter: MEI, Hualin

Session Classification: Detector Hardware

Contribution ID: 135

Type: **not specified**

Status on TRIDENT timing system

Thursday, 20 November 2025 14:00 (20 minutes)

Presenter: GONG, Guanghai (Tsinghua University)

Session Classification: Detector Hardware

Contribution ID: **136**

Type: **not specified**

Status on data acquisition software

Thursday, 20 November 2025 14:20 (30 minutes)

Presenter: WAN, Peng (上海交通大学)

Session Classification: Detector Hardware

Contribution ID: **137**

Type: **not specified**

Coffee Break

Thursday, 20 November 2025 14:50 (20 minutes)

Session Classification: Detector Hardware

Contribution ID: **138**

Type: **not specified**

Data Monitor Status

Thursday, 20 November 2025 15:10 (15 minutes)

Presenter: ZHU, Yiwei (Shanghai Jiao Tong University)

Session Classification: Detector Hardware

Contribution ID: **139**

Type: **not specified**

Single string joint test

Thursday, 20 November 2025 15:25 (15 minutes)

Presenter: WU, peilian (sjtu)

Session Classification: Detector Hardware

Contribution ID: **140**

Type: **not specified**

PMT test progress

Thursday, 20 November 2025 15:40 (20 minutes)

Presenter: SHAO, Hengbin

Session Classification: Detector Hardware

Contribution ID: **141**

Type: **not specified**

Progress on PMT base with HV boosting

Thursday, 20 November 2025 16:00 (20 minutes)

Presenter: ZHI, Wei

Session Classification: Detector Hardware

Contribution ID: 142

Type: **not specified**

Progress on PMT base with HV boosting

Thursday, 20 November 2025 16:20 (10 minutes)

Presenter: ZHI, Wei

Session Classification: Detector Hardware

Contribution ID: 143

Type: **not specified**

A 16-Channel Fast-timing ASIC for Largearea SiPM Arrays Readout in the TRIDENT Experiment

Thursday, 20 November 2025 16:30 (20 minutes)

Presenter: WANG, Mingxin

Session Classification: Detector Hardware

Contribution ID: 144

Type: **not specified**

Development Progress of the Ultrasonic Localization Interface Module

Thursday, 20 November 2025 16:50 (15 minutes)

Presenter: YANG, Yanxiao

Session Classification: Detector Hardware

Contribution ID: 145

Type: **not specified**

Tracing solar modulation thorough Ice Cherenkov Observations and Yield Function Analysis

Friday, 21 November 2025 09:00 (30 minutes)

Presenter: NUNTIYAKUL, Waraporn

Session Classification: Physics & Simulation

Contribution ID: 146

Type: **not specified**

Modeling Cosmic Rays from the Atmosphere to Interplanetary Space

Friday, 21 November 2025 09:30 (30 minutes)

Presenter: SERIPIENLERT (KIM), Achara

Session Classification: Physics & Simulation

Contribution ID: **147**

Type: **not specified**

TRIDENT Simulation Overview

Friday, 21 November 2025 10:20 (30 minutes)

Presenter: MORTON-BLAKE, Iwan (Tsung-Dao Lee Institute / Shanghai Jiao Tong University)

Session Classification: Physics & Simulation

Contribution ID: 148

Type: **not specified**

Detecting the Next Galactic CoreCollapse Supernova with TRIDENT

Friday, 21 November 2025 10:50 (30 minutes)

Presenter: CAO, Ruike (SJTU)

Session Classification: Physics & Simulation

Contribution ID: **149**

Type: **not specified**

Projected DM detection sensitivity

Friday, 21 November 2025 11:20 (30 minutes)

Presenter: WANG, Yingwei

Session Classification: Physics & Simulation

Contribution ID: **150**

Type: **not specified**

Recent development related to Corsika8

Friday, 21 November 2025 11:50 (20 minutes)

Presenter: HUANG, Weilun

Session Classification: Physics & Simulation

Contribution ID: **151**

Type: **not specified**

TREX2024 mDOM Analysis

Friday, 21 November 2025 13:30 (30 minutes)

Presenter: ZHANG, Fuyudi

Session Classification: Simulation & Data Analysis

Contribution ID: **152**

Type: **not specified**

TREX2024 Camera Analysis

Friday, 21 November 2025 14:00 (30 minutes)

Presenter: ZHANG, haoyan (李政道研究所)

Session Classification: Simulation & Data Analysis

Contribution ID: **153**

Type: **not specified**

Energy Reconstruction

Friday, 21 November 2025 14:30 (20 minutes)

Presenter: HUANG, Jingtao (上海交通大学李政道研究所)

Session Classification: Simulation & Data Analysis

Contribution ID: 154

Type: **not specified**

ReconstructionTrack–Cascade Event Classification Method Based on Time Information

Friday, 21 November 2025 15:10 (20 minutes)

Presenter: CAO, Yaoqi

Session Classification: Simulation & Data Analysis

Contribution ID: 155

Type: **not specified**

Cascade reconstruction in phase 1

Friday, 21 November 2025 15:30 (20 minutes)

Presenter: JIE, Tinqi

Session Classification: Simulation & Data Analysis

Contribution ID: **156**

Type: **not specified**

4 inch PMT DOM sim

Friday, 21 November 2025 15:50 (20 minutes)

Presenter: SHAO, Hengbin

Session Classification: Simulation & Data Analysis

Contribution ID: **157**

Type: **not specified**

DOM Radioactivity Measurement and Sim

Friday, 21 November 2025 16:10 (20 minutes)

Presenter: LIU, Shasha

Session Classification: Simulation & Data Analysis

Contribution ID: **158**

Type: **not specified**

Gel Pad R&D

Friday, 21 November 2025 16:30 (20 minutes)

Presenter: LIU, Jiexi

Session Classification: Simulation & Data Analysis

Contribution ID: **159**

Type: **not specified**

Acoustic Positioning System Overview

Saturday, 22 November 2025 09:00 (10 minutes)

Presenter: WEI, Handi

Session Classification: Underwater acoustic positioning

Contribution ID: **160**

Type: **not specified**

APS simulation

Saturday, 22 November 2025 09:10 (10 minutes)

Presenter: LIU, Junhong

Session Classification: Underwater acoustic positioning

Contribution ID: **161**

Type: **not specified**

Recent Progress in the Electronics of the Acoustic Positioning System

Saturday, 22 November 2025 09:20 (10 minutes)

Presenter: LUO, Jiahao

Session Classification: Underwater acoustic positioning

Contribution ID: **162**

Type: **not specified**

Method for Acoustic Ray Correction in Underwater Positioning of Deep-Sea Neutrino Telescopes

Saturday, 22 November 2025 09:30 (10 minutes)

Presenter: ZHANG, Zhaozhi

Session Classification: Underwater acoustic positioning

Contribution ID: **163**

Type: **not specified**

C-string prelim design review

Saturday, 22 November 2025 10:00 (1 hour)

Presenters: CHENG, Jingguang; ZHU, Tailin (TDLI); ZHANG, Zhaozhi; ZHANG, haoyan (李政道研究所); GAO, yonghui

Session Classification: Underwater acoustic positioning

Contribution ID: **164**

Type: **not specified**

Review Q&A

Saturday, 22 November 2025 11:00 (1 hour)

Presenter: ALL, Experts

Session Classification: Underwater acoustic positioning

Contribution ID: **165**

Type: **not specified**

Decoding Ocean Life through Light Spectra

Friday, 21 November 2025 16:50 (15 minutes)

Presenter: HU, Haojie

Session Classification: Simulation & Data Analysis