

# **Simulation & Analysis Workshop**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Welcome & Discussion

*Monday, 30 September 2024 08:00 (1 hour)*

Motivation, objectives, and desired outcomes  
Navigating GitLab space layout & guidelines

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 2

Type: **not specified**

## Working Session: Getting Started

*Monday, 30 September 2024 09:00 (1 hour)*

Getting started with FNAL computing  
Google Collab notebooks  
Git crash course

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 3

Type: **not specified**

## Overview of Existing Tools & Projects

*Tuesday, 1 October 2024 08:15 (1 hour)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 4

Type: **not specified**

## Discussion & Recap

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 5

Type: **not specified**

## **Demo #1: Forward Detector Simulation**

*Wednesday, 2 October 2024 17:40 (1h 15m)*

**Presenter:** WEATHERILL, Dan (Oxford)

Contribution ID: 6

Type: **not specified**

## Discussion

*Monday, 30 September 2024 11:30 (30 minutes)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 7

Type: **not specified**

## Demo #2: GradOptics

*Monday, 30 September 2024 13:00 (1h 15m)*

**Presenter:** GASIOROWSKI, Sean (SLAC National Accelerator Laboratory (US))



Contribution ID: 8

Type: **not specified**

## Discussion

*Monday, 30 September 2024 14:15 (30 minutes)*

**Presenter:** GASIOROWSKI, Sean (SLAC National Accelerator Laboratory (US))

Contribution ID: 9

Type: **not specified**

## Day 1 Closing Remarks

*Monday, 30 September 2024 16:15 (45 minutes)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: **10**

Type: **not specified**

# Welcome

*Tuesday, 1 October 2024 08:00 (15 minutes)*

Contribution ID: 11

Type: **not specified**

# Collaborative Software Development Practices

*Monday, 30 September 2024 15:00 (1 hour)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 12

Type: **not specified**

## Review of Software Challenge Problems

*Tuesday, 1 October 2024 09:15 (30 minutes)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 13

Type: **not specified**

## Discussion

*Tuesday, 1 October 2024 09:45 (15 minutes)*

Contribution ID: 14

Type: **not specified**

## **Demo #3: Analytic Wavefunction Calculators**

*Tuesday, 1 October 2024 10:15 (1h 15m)*

**Presenters:** MITCHELL, Jeremiah (University of Cambridge); MOUELLE, Noam (Cambridge)

Contribution ID: 15

Type: **not specified**

## Discussion

*Tuesday, 1 October 2024 11:30 (30 minutes)*

**Presenters:** MITCHELL, Jeremiah (University of Cambridge); MOUELLE, Noam (Cambridge)



Contribution ID: 16

Type: **not specified**

## **Demo #4: Semi-Classical Multi-Path Wavefunction Calculator**

*Tuesday, 1 October 2024 13:00 (1h 15m)*

**Presenter:** GLICK, Jonah (Northwestern University)

Contribution ID: 17

Type: **not specified**

## Discussion

*Tuesday, 1 October 2024 14:15 (30 minutes)*

**Presenter:** GLICK, Jonah (Northwestern University)

Contribution ID: **18**

Type: **not specified**

## **Working Session Introduction**

*Tuesday, 1 October 2024 15:00 (15 minutes)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: **19**

Type: **not specified**

## **Working Session #1**

*Tuesday, 1 October 2024 15:15 (1h 45m)*

Contribution ID: 20

Type: **not specified**

## Day 2 Closing Discussion

*Tuesday, 1 October 2024 17:15 (30 minutes)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: **21**

Type: **not specified**

# Welcome

*Wednesday, 2 October 2024 08:00 (15 minutes)*

Contribution ID: 22

Type: **not specified**

## **Demo #5: Analytical Phase Shift Methodology**

*Wednesday, 2 October 2024 08:15 (1h 15m)*

**Presenter:** KOVACHY, Tim Kovachy (Northwestern University)

Contribution ID: 23

Type: **not specified**

## Discussion

*Wednesday, 2 October 2024 09:30 (30 minutes)*

**Presenter:** KOVACHY, Tim Kovachy (Northwestern University)



Contribution ID: 24

Type: **not specified**

## **Working Session #2**

*Wednesday, 2 October 2024 10:15 (1h 45m)*

Contribution ID: 25

Type: **not specified**

## **Working Session #3**

*Wednesday, 2 October 2024 13:00 (1h 30m)*

Contribution ID: 26

Type: **not specified**

## **Reports from Working Groups & Closing Discussion**

*Wednesday, 2 October 2024 14:45 (45 minutes)*

Contribution ID: 27

Type: **not specified**

## Discussion

Contribution ID: 28

Type: **not specified**

## Workshop Closing Discussion

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: 29

Type: **not specified**

## Demo #6: Python DM Tools

*Monday, 30 September 2024 10:15 (1h 15m)*

**Presenter:** TEMPLES, Dylan (Fermilab)

Contribution ID: **30**

Type: **not specified**

## Dan Carney Visit

*Tuesday, 1 October 2024 09:50 (25 minutes)*

Contribution ID: **31**

Type: **not specified**

## **Dan Carney Seminar**

*Wednesday, 2 October 2024 15:30 (1h 15m)*

Terrestrial Tests of Quantum Gravity