

**Pathway Fermilab and  
Brookhaven Summer School -  
BNL Neutrino Week**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Onboarding and badging

*Monday 3 July 2023 08:00 (1 hour)*

Students will get a badge and some introductory materials.

Contribution ID: 2

Type: **not specified**

## **Roundtable introductions and Computing setup**

*Monday 3 July 2023 09:00 (1 hour)*

Contribution ID: 3

Type: **not specified**

## Mathematica UNIT 1: Introduction

*Monday 3 July 2023 10:00 (1 hour)*

Initial introduction to problem solving by computer.

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: 4

Type: **not specified**

## Mathematica UNIT 2: Basics

*Monday 3 July 2023 11:00 (1 hour)*

Introduction to using Mathematica to solve problems.

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: 5

Type: **not specified**

## Lunch

Contribution ID: 6

Type: **not specified**

## Mathematica UNIT 3: Mechanics

*Monday 3 July 2023 13:30 (1 hour)*

Simple mechanics, astronomy, calculate the amount of matter in our galaxy.

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: 7

Type: **not specified**

## **RHIC/Magnet Division Tours**

*Monday 3 July 2023 14:30 (1h 30m)*



Contribution ID: 8

Type: **not specified**

## Mathematica UNIT 4: Electromagnetism

*Wednesday 5 July 2023 09:00 (1h 30m)*

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: 9

Type: **not specified**

## Mathematica UNIT 5: Statistics

*Wednesday 5 July 2023 10:30 (1h 30m)*

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: **10**

Type: **not specified**

## **Mathematica UNIT 6: Neutrino Oscillations**

*Wednesday 5 July 2023 13:30 (1h 30m)*

**Presenter:** DIWAN, Milind Vaman (Brookhaven National Laboratory (US))

Contribution ID: 11

Type: **not specified**

## **BLIP/Isotope production/Actinium 225/Scintillation lab Tours**

*Wednesday 5 July 2023 15:00 (1h 30m)*

Contribution ID: 12

Type: **not specified**

## Activities Review and Q&A

*Thursday 6 July 2023 09:00 (1 hour)*

**Authors:** Dr F. CARNEIRO, Mateus (Brookhaven National Laboratory); Dr F. CARNEIRO, Mateus (Brookhaven National Laboratory)

**Presenters:** Dr F. CARNEIRO, Mateus (Brookhaven National Laboratory); Dr F. CARNEIRO, Mateus (Brookhaven National Laboratory)

Contribution ID: **13**

Type: **not specified**

## **Meet STEM professionals**

*Thursday 6 July 2023 10:00 (1 hour)*

Contribution ID: **14**

Type: **not specified**

## Talk: What is C14?

*Thursday 6 July 2023 11:00 (1 hour)*

Contribution ID: 15

Type: **not specified**

## **NNDC visit and exercises**

*Thursday 6 July 2023 13:30 (3 hours)*



Contribution ID: 16

Type: **not specified**

## Talk: Reactor Neutrinos

*Friday 7 July 2023 09:00 (1 hour)*

**Author:** Dr ZHANG, Chao (Brookhaven National Laboratory)

**Presenter:** Dr ZHANG, Chao (Brookhaven National Laboratory)

Contribution ID: 17

Type: **not specified**

## **Meet Interns in Nuclear/Particle Physics group**

*Friday 7 July 2023 11:00 (1 hour)*

Contribution ID: **18**

Type: **not specified**

## Talk: Detector Technologies

*Friday 7 July 2023 10:00 (1 hour)*

**Author:** LINDEN, Steven

**Presenter:** LINDEN, Steven

Contribution ID: 19

Type: **not specified**

## Water based Liquid Scintillator 1-ton Detector Experience

*Friday 7 July 2023 13:30 (3 hours)*

Visit to the 1-ton Water-based Liquid Scintillator (WbLS) detector in the Instrumentation Division. Students will be divided in 4 groups. Each group will take 15-20 minutes of data with the detector and later analyze it.

**Authors:** LAWLEY, Gannon; VICENZI, Matteo (Brookhaven National Laboratory)

**Co-author:** YANG, Guang

**Presenters:** LAWLEY, Gannon; YANG, Guang; VICENZI, Matteo (Brookhaven National Laboratory)