

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

Report of Contributions

Contribution ID: 2

Type: **not specified**

Introductions and computing setup

Monday 24 July 2023 09:00 (1 hour)

Contribution ID: 3

Type: **not specified**

Mathematica UNIT 1: Introduction

Monday 24 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 24 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 24 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**

Tour: RHIC Control Room/Magnet Division

Monday 24 July 2023 14:30 (1h 30m)

Presenter: SHREY, Travis (BNL)

Contribution ID: 8

Type: **not specified**

Mathematica UNIT 4: Electromagnetism

Tuesday 25 July 2023 09:00 (1h 30m)

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

Contribution ID: 9

Type: **not specified**

Mathematica UNIT 5: Statistics

Tuesday 25 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

Tuesday 25 July 2023 13:30 (2 hours)

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

Contribution ID: **11**

Type: **not specified**

Tour: BLIP/Liquid Scintillator Lab

Wednesday 26 July 2023 14:30 (1h 30m)

Contribution ID: 12

Type: **not specified**

Activities Review and Q&A

Friday 28 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 27 July 2023 10:00 (1 hour)

Students will meet with STEM professionals working at BNL that will share their experience of being a scientist.

Presenters: Mr CHIMANSKI, Emanuel (Instituto Tecnológico de Aeronáutica, NAPC-Nuclear Data Section, International Atomic Energy Agency); LOVELACE III, Henry; Dr ASSAMAGAN, Ketevi Adikle (Brookhaven National Laboratory (US)); CHIU, Mickey

Contribution ID: 14

Type: **not specified**

Talk: What is C14?

Thursday 27 July 2023 11:00 (1 hour)

Author: Mr CHIMANSKI, Emanuel (Instituto Tecnológico de Aeronáutica, NAPC-Nuclear Data Section, International Atomic Energy Agency)

Presenter: Mr CHIMANSKI, Emanuel (Instituto Tecnológico de Aeronáutica, NAPC-Nuclear Data Section, International Atomic Energy Agency)

Contribution ID: 15

Type: **not specified**

NNDC visit and exercises

Thursday 27 July 2023 13:30 (2h 30m)

Contribution ID: 16

Type: **not specified**

Talk: Reactor Neutrinos

Thursday 27 July 2023 09:00 (1 hour)

Authors: QIAN, Xin (Brookhaven National Laboratory (US)); QIAN, Xin (Brookhaven National Laboratory)

Co-author: Dr ZHANG, Chao (Brookhaven National Laboratory)

Presenters: QIAN, Xin (Brookhaven National Laboratory (US)); QIAN, Xin (Brookhaven National Laboratory)

Contribution ID: 17

Type: **not specified**

Meet Interns in Nuclear/Particle Physics group

Wednesday 26 July 2023 13:30 (1 hour)

Students will meet with Summer Interns that will share their experience in surviving college, studying STEM and landing an internship at BNL.

Contribution ID: **18**

Type: **not specified**

Talk: Detector Technologies

Friday 28 July 2023 10:00 (1 hour)

Authors: LINDEN, Steven; LINDEN, Steven (Boston University)

Presenters: LINDEN, Steven; LINDEN, Steven (Boston University)

Contribution ID: 19

Type: **not specified**

WbLS 1-ton Detector Experience: Data taking and analysis

Friday 28 July 2023 13:30 (2h 30m)

Students will be divided in 4 groups. Each group will take 15-20 minutes of data with the 1-ton WbLS detector and later analyze it.

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

Co-author: YANG, Guang

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

Contribution ID: **20**

Type: **not specified**

Talk: Dark Matter and Snowball detector demonstration

Wednesday 26 July 2023 09:00 (2h 30m)

Students will follow an introductory talk on Dark Matter and a lab demonstration for the innovative “Snowball” detector concept.

Author: SZYDAGIS, Matthew

Presenter: SZYDAGIS, Matthew

Contribution ID: **21**

Type: **not specified**

WbLS 1-ton Detector Experience: Intro and tour

Friday 28 July 2023 11:00 (1 hour)

Visit to the 1-ton Water-based Liquid Scintillator (WbLS) detector in the Instrumentation Division.

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

Co-author: YANG, Guang

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