

# **Physics Department Summer Lectures 2022**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **The Standard Model and Beyond (Block 1)**

*Tuesday, 14 June 2022 13:00 (1h 15m)*

Hosted by: Milind Diwan

**Presenter:** DAVOUDIASL, Hooman (Brookhaven National Laboratory)

Contribution ID: 2

Type: **not specified**

## **Introduction to Neutrino Physics (Block 1)**

*Friday, 17 June 2022 13:00 (1h 15m)*

Hosted by: Peter Petreczky

**Presenter:** DENTON, Peter

Contribution ID: 3

Type: **not specified**

## **The muon particle and its g-2 value (Block 2)**

*Tuesday, 21 June 2022 13:00 (1h 15m)*

Hosted by: Wlodek Gryn

**Presenter:** MORSE, Bill (BNL)

Contribution ID: 4

Type: **not specified**

## **Search for Higgs boson decay to invisible particles and interpretation for dark matter, with the ATLAS detector(Block 2)**

*Friday, 24 June 2022 13:00 (1h 15m)*

Hosted by: Peter Petreczky

**Abstract:** I will introduce what is meant by “invisible” particles and how we can detect them even though they are “invisible”. Then, I will introduce dark matter and discuss why certain types of invisible particles might be candidates for dark matter. Finally, I will present a search for invisible particles in the decays of the Higgs boson and discuss its interpretation for dark matter search.

**Presenter:** ASSAMAGAN, Ketevi Adikle (BNL)

Contribution ID: 5

Type: **not specified**

## The g-2 experiment at Fermilab

*Tuesday, 28 June 2022 13:00 (1h 15m)*

Hosted by: Wlodek Guryń

**Presenter:** TISHCHENKO, Vladimir (BNL)

Contribution ID: 6

Type: **not specified**

## QCD RHIC (Blocks 3)

*Friday, 1 July 2022 13:00 (1h 15m)*

Hosted by: Milind Diwan

**Presenter:** PISARSKI, Rob (Brookhaven National Laboratory)

Contribution ID: 7

Type: **not specified**

## **Introduction to QCD and High Energy Spin Physics(Block 3)**

*Tuesday, 5 July 2022 13:00 (1h 15m)*

Hosted by: Aihong Tang

**Presenter:** HATTA, Yoshitaka (BNL)



Contribution ID: 8

Type: **not specified**

## **The journey to seek symmetry in Quark-Gluon Plasma(Block 6)**

*Friday, 8 July 2022 13:00 (1h 15m)*

Hosted by: Aihong Tang

**Presenter:** RUAN, Lijuan (Brookhaven National Laboratory)

Contribution ID: 9

Type: **not specified**

## **EIC (block 3)**

Contribution ID: **10**

Type: **not specified**

## **Introductory to Cosmology (Block 4)**

*Friday, 15 July 2022 13:00 (1h 15m)*

Hosted by: Peter Petreczky

**Presenter:** MIRANDA , Vivian (SBU)

Contribution ID: 11

Type: **not specified**

# Quantum Computing

*Tuesday, 9 August 2022 13:00 (1h 15m)*

Hosted by: Wlodek Gryn

**Presenter:** BARATA, Joao (BNL)

Contribution ID: 12

Type: **not specified**

## **Silicon Detector Systems (Block 5)**

*Friday, 22 July 2022 13:00 (1h 15m)*

Hosted by: Peter Petreczky

**Presenter:** LYNN, David (BNL)

Contribution ID: 13

Type: **not specified**

## From RF to Optics (Block 5)

*Tuesday, 26 July 2022 13:00 (1h 15m)*

Hosted by: Peter Petreczky

**Presenter:** HAUPT, Justine

Contribution ID: 14

Type: **not specified**

## **Introduction to Instrumentation (Block 5)**

*Friday, 29 July 2022 13:00 (1h 15m)*

Hosted by: Aihong Tang

**Presenter:** WORCESTER, Matthew (BNL)

Contribution ID: 15

Type: **not specified**

## **Introduction to Accelerator Physics (Block 3)**

*Tuesday, 2 August 2022 13:00 (1h 15m)*

Hosted by Wlodek Guryn

**Presenter:** VERDÚ-ANDRÉS, Silvia (Brookhaven National Laboratory (BNL))



Contribution ID: 16

Type: **not specified**

# **The electron-ion collider: A collider to unravel the mysteries of visible matter**

*Friday, 5 August 2022 13:00 (1h 15m)*

Hosted by: Milind Diwan

**Presenter:** Dr ASCHENAUER, E. C. (BNL)