# Qiskit | Global Summer School 2022

# Week 1 Schedule

**JUNE 20** 

Monday

# 9:00 AM EDT

Early Access Summer School Welcome & Kickoff

#### 11:00 AM EDT

History of Quantum Computing and Motivation for Quantum Simulation - Part 1 Speaker: Olivia Lanes

# 1:00 PM EDT

History of Quantum Computing and Motivation for Quantum Simulation - Part 2 Speaker: Olivia Lanes

# 3:00 PM EDT

Live Q&A Session with Olivia Lanes

# **JUNE 21**

Tuesday

#### 9:00 AM EDT

Introduction to Linear Algebra, Prerequisite Mathematics, and Circuit Composition - Part 1 Speaker: Maria Violaris

# 11:00 AM EDT

Introduction to Linear Algebra, Prerequisite Mathematics, and Circuit Composition – Part2 Speaker: Maria Violaris

# 1:00 PM EDT

Live Q&A Session with Maria Violaris

# **JUNE 22**

Wednesday

#### 9:00 AM EDT

Hamiltonian Time Evolution -Part 1 Speaker: Maria Violaris

# 11:00 AM EDT

Hamiltonian Time Evolution -Part 2 Speaker: Maria Violaris

# 1:00 PM EDT

Live Q&A Session with Maria Violaris

# 2:00 PM EDT

Lab 1: Introduction to Circuit Composition and Cost Marcel Pfaffhauser

# **JUNE 23**

Thursday

#### 9:00 AM EDT

Simulation Problems - Part 1 Speaker: Jeffrey Cohn

# 11:00 AM EDT

Simulation Problems - Part 2 Speaker: Jeffrey Cohn

# 1:00 PM EDT

Live Q&A Session with Jeffrey Cohn

# 3:00 PM EDT

Lab 2: Advanced Circuits Mirko Amico

# **JUNE 24**

Friday

#### 9:00 AM EDT

Noisy Real Hardware - Noise in Quantum Computers - Part 1 Speaker: Zlatko Minev

### 11:00 AM EDT

Noisy Real Hardware - Noise in Quantum Computers - Part 2 Speaker: Zlatko Minev

# 1:30 PM EDT

Live Q&A Session with Zlatko Minev

# Qiskit | Global Summer School 2022

# Week 2 Schedule

June 27 Monday

# 9:00 AM EDT

Broad Overview of Quantum Chemistry Simulation and Why it is a Challenge - Part 1 Speaker: Panos Barkoutsos

# 11:00 AM EDT

Broad Overview of Quantum Chemistry Simulation and Why it is a Challenge - Part 2 Speaker: Panos Barkoutsos

# 1:00 PM EDT

Live Q&A Session with Panos Barkoutsos

# 2:30 PM EDT

Lab 3: Quantum Noise Mirko Amico JUNE 28

Tuesday

### 9:00 AM EDT

Methods for Quantum Simulation - Part 1 Speaker: Yukio Kawashima

# 11:00 AM EDT

Methods for Quantum Simulation - Part 2 Speaker: Yukio Kawashima

# 1:00 PM EDT

Live Q&A Session with Yukio Kawashima

**JUNE 29** 

Wednesday

#### 9:00 AM EDT

Quantum Static Simulation Speaker: Ieva Liepuoniute

### 11:00 AM EDT

Live Q&A Session with Ieva Liepuoniute

**JUNE 30** 

Thursday

#### 9:00 AM EDT

Quantum Dynamics - Part 1 Speaker: Alexander Miessen **JULY 1** Friday

11:00 AM EDT

Commencement

# 11:00 AM EDT

Quantum Dynamics - Part 2 Speaker: Alexander Miessen

# 1:00 PM EDT

Live Q&A Session with Alexander Miessen