



NSSY2017
Program

The Nanoscience Summer School @Yachay 2017

August 31st to September 5th 2017



The Nanoscience Summer School @Yachay 2017 (NSSY) Program

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Editors: Duncan John Mowbray
Henry Paúl Pinto Esparza
Ask Hjorth Larsen
Keenan Lyon

Thursday, August 31st

10:00 – 11:00 Intro to Electronic Structure Theory

Duncan John Mowbray *BMath, BSc, MSc, PhD*
Yachay Tech University

13:00 – 14:00 Ising Model: Theory & Applications

Alejandro Pérez-Paz *BSc, PhD*
Yachay Tech University

14:00 – 15:00 High Performance Computing and Parallelization

Ask Hjorth Larsen *BSc+MSc, PhD*
Universidad del País Vasco UPV/EHU

16:00 – 17:00 Cellular Automata

Leonardo Iván Reyes *BEng, MSc, PhD*
Yachay Tech University

Friday, September 1st

10:30 – 11:30 Intro to Scanning Tunneling Microscopy

Juan Carlos Moreno López *BEng, PhD*
Yachay Tech University

13:00 – 14:00 Monte Carlo Methods

Keenan Lyon *BSc, MMath*
University of Waterloo

14:30 – 15:30 Intro to Density Functional Theory

Duncan John Mowbray *BMath, BSc, MSc, PhD*
Yachay Tech University

17:00 – 20:00 Scientific Python Practicum: Density Functional Hacking

Ask Hjorth Larsen *BSc+MSc, PhD*
Universidad del País Vasco UPV/EHU

Monday, September 4th

9:00 – 10:00 Introduction to Quantum QSAR

Jerzy Leszczynski *BSc, MSc, PhD*
Jackson State University

10:30 – 11:30 Applications of QSAR

Alicia M *PhD*

13:00 – 14:00 Introductory Raman Lecture

Jorge Serrano Gutiérrez *BSc+MSc, Dr. rer. nat.*
Yachay Tech University

14:00 – 15:00 Nanoparticle Synthesis

Sarah Briceño *BSc, PhD*
Venezuelan Institute for Scientific Research & Yachay Tech University

16:00 – 18:00 Poster Session Library

Tuesday, September 5th

10:00 – 11:00 Introduction to Tight Binding

Ernesto Medina Dagger *BSc, PhD, SVG, ICTP-SAIFR*
Yachay Tech University

13:00 – 14:00 Graphene Spectroscopy

Julio Cesar Chacón Torres *BSc, Dr. rer. nat.*
Yachay Tech University

14:30 – 15:30 Graphene Applications

Camilo Zamora Ledezma *BSc, Ph.D.*
Yachay Tech University

16:00 – 17:00 Applications of Density Functional Theory

Henry Paúl Pinto Esparza *BSc+MSc, PhD*
Yachay Tech University