



# USCMS Undergraduate Summer Internship 2022

## Monday 6 June 2022

### Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[1] Welcome by USCMS	JAYATILAKA, Bo BLOOM, Kenneth BLACK, Kevin BAUERDICK, Lothar NARAIN, Meenakshi MALIK, Sudhir BOSE, Tulika
10:00	[2] Introductions by Interns and Mentors	
11:00	[3] Schedule Format	MALIK, Sudhir
12:00	[4] Introduction to CMS Computing at FNAL	NORBERG, Scarlet Rachel

# Tuesday 7 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[11] The UNIX Shell: A guide through the basics of the file systems and the shell	MAMBELLI, Marco
12:00	[12] Overview of the Standard Model	PERLOFF, Alexx

# Wednesday 8 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[14] Unix: Automating Tasks with Unix Shell	MAMBELLI, Marco

# Thursday 9 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[17] Python II: Building Programs with Python	MOREIRA COIMBRA, Bruno

# Friday 10 June 2022

## Morning: Morning - Virtual (09:00 - 13:05)

time	[id] title	presenter
09:00	[18] Git II - In this lesson we use Git from the Unix Shell	MAMBELLI, Marco
12:00	[19] Meeting with the Mentors	

# Monday 13 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[21] Python for analysis: ROOT and Jupyter notebooks	

# Tuesday 14 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[23] Python for analysis: plots and fits with ROOT and RDataFrame	
12:00	[26] Higgs overview and mass measurements	MITSELMAKHER, Guenakh



# Wednesday 15 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[27] Meeting with the Mentors	
10:00	[28] Python for analysis: HEP analysis with RDataFrame	

# Thursday 16 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id]	title	presenter
09:00	[31]	Python for analysis 2: Uproot and Scikit-HEP	

# Friday 17 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[34] Followup	
	- [1] Accelerating Science with Particles - chat with interns	MALIK, Sudhir
12:00	[35] Calorimeter Detector Basics	DITTMANN, Jay

# Tuesday 21 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[43] Machine Learning	FIDALGO RODRIGUEZ, Guillermo Antonio
12:00	[40] Overview of BSM Higgs boson	MOHAMMADI, Abdollah

# Wednesday 22 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[41] Machine Learning	
12:00	[53] Meeting with the Mentors	

# Thursday 23 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[47] 5 min 5 slides	
11:00	[48] Meeting with Mentors	

# Friday 24 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[54] Machine Learning and followup	
12:00	[55] Free time	

# Monday 27 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
09:00	[60] 5 min 5 slides	
09:15	[59] C++ Setup	FIDALGO RODRIGUEZ, Guillermo Antonio
10:00	[61] C++ Course Material	



# Tuesday 28 June 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[44] Top Quarks Physics at CMS	DITTMER, Susan J

# Wednesday 29 June 2022

**Morning: Morning - Virtual (09:00 - 13:00)**

# Thursday 30 June 2022

## Morning: Morning - Virtual (09:00 - 11:30)

time	[id] title	presenter
09:00	[62] C++ Review	KORAKA, Charis Kleio FIDALGO RODRIGUEZ, Guillermo Antonio

# Friday 1 July 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[57] Muon Detector	Prof. BLACK, Kevin

# Tuesday 5 July 2022

**Morning: Morning - Virtual (09:00 - 13:00)**

# Wednesday 6 July 2022

**Morning: Morning - Virtual (09:00 - 13:00)**

# Thursday 7 July 2022

**Morning: Morning - Virtual (09:00 - 13:00)**

# Friday 8 July 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[65] Heavy Ions at CMS	Dr KRINTIRAS, Georgios



# Tuesday 19 July 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[42] Overview of Double Higgs Production	BETHANI, Agni

# Tuesday 26 July 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[66] Long-lived Particle Search Overview	ADAMS, Todd ADAMS, Todd

# Thursday 28 July 2022

## Morning: Afternoon - Virtual (14:00 - 18:00)

time	[id] title	presenter
15:00	[70] Interviewing techniques	HOGAN, Julie

# Tuesday 2 August 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[67] Quarks and Gluons	LI, Daniel

# Friday 12 August 2022

## Morning: Morning - Virtual (09:00 - 13:00)

time	[id] title	presenter
12:00	[95] Stats in analysis	Ms YOO, Jieun