

Nuclear Physics School (NPS2025)

Tuesday, 1 July 2025

Machine Learning Application - □□□□ (11:00 - 12:30)

-Conveners: MinJung Kweon

time	[id] title	presenter
11:00	[5] Machine learning in physical science: basics, applications, and challenges I	Dr SHIN, Min-Su

Machine Learning Application - □□□□ (14:00 - 15:30)

-Conveners: MinJung Kweon

time	[id] title	presenter
14:00	[6] Machine learning in physical science: basics, applications, and challenges II	Dr SHIN, Min-Su

Machine Learning Application - □□□□ (16:00 - 18:00)

time	[id] title	presenter
16:00	[16] Selected Algorithms I: Decision Tree, Ensemble Learning, Boosting, Generative Adversarial Network (GAN)	KWEON, MinJung

Wednesday, 2 July 2025

Machine Learning Application - □□□□ (09:00 - 10:00)

-Conveners: MinJung Kweon		
time	[id] title	presenter
09:00	[7] Using generative models for nuclear and particle physics I	Prof. CHOI, Suyong

Machine Learning Application - □□□□ (10:30 - 11:30)

-Conveners: MinJung Kweon		
time	[id] title	presenter
10:30	[8] Using generative models for nuclear and particle physics II	Prof. CHOI, Suyong

Machine Learning Application - □□□□ (12:30 - 14:00)

-Conveners: MinJung Kweon		
time	[id] title	presenter
12:30	[9] Density Estimation with Neural Transformations: Normalizing Flows and Diffusion Models	Dr LIM, Sung Hak

Machine Learning Application - □□□□ (14:30 - 16:00)

-Conveners: MinJung Kweon		
time	[id] title	presenter
14:30	[10] Galactic Dark Matter Density Estimation Using Astronomical Surveys of Galaxies	Dr LIM, Sung Hak

Thursday, 3 July 2025

Machine Learning Application - □□□□ (09:00 - 10:30)

-Conveners: MinJung Kweon		
time	[id] title	presenter
09:00	[11] Applications of Machine Learning in Nuclear Physics and Opportunities for Nucleosynthesis Studies (TBC)	Dr SMITH, Michael

Machine Learning Application - □□□□ (11:00 - 12:30)

-Conveners: MinJung Kweon		
time	[id] title	presenter
11:00	[12] Application of AI/ML in Relativistic Heavy Ion Physics	Dr GO, Yeonju

Machine Learning Application - □□□□ (15:30 - 17:00)

-Conveners: MinJung Kweon		
time	[id] title	presenter
15:30	[17] Selected Algorithms II: CNN, RNN, Transformer	KWEON, MinJung