

2nd Workshop on Artificial Intelligence in Plasma Science (WAIPS-2)
(5-6 July, 2022, Aix-en-Provence, France)

5 July (Tuesday)	
Session I	Session Chair: S. Hamaguchi
11:00 - 11:30	S. Benkadda: Physics informed AI for plasma science (CNRS&AMU)
11:30 - 12:00	Y. Kuramitsu: Innovation of laser-driven quantum beam generations and diagnostics with informatics (OU.)
lunch	
Session II	Session Chair: Y. Kuramitsu
14:00-14:30	N. Saura: Understanding convolutional neural networks from blocks to architectures and applications (CNRS&AMU)
14:30-15:00	B. D. Hattingh: The effect of fabrication conditions on hydrogen trapping in tungsten (OU)
15:00 -15:30	F. Nikaido: Measurements of laser-driven ions with fluorescence nuclear track detector using machine learning (OU)
15:30- 16:00	S. Taira: Etching reactions of high energy ion with SiO ₂ /SiN nano-scale multi-layers (OU).

6 July (Wednesday)	
Session III	Session Chair: S. Benkadda
11:00 - 11:30	Adel Saleh: Mathematical approach to self organization in Hasegawa Mima Turbulence (American University of Beirut)
11:30 - 12:00	S. Hamaguchi: Regression of parallel-plate capacitively coupled plasmas (CCP) profiles obtained from numerical simulations (OU)
lunch	
Session IV	Session Chair: B. Hattingh
14:00 - 14:30	N. Saura: Improving penalized semi supervised nonnegative matrix factorization result's confidence using deep residual learning approach in spectrum analysis (CNRS,AMU)
14:30-15:00	D. Haraguchi: Deuterium retention and surface modification of W-Re alloys (OU)
15:00-15:15	break
Session V	Session Chair: N. Saura
15:15-16:45	A. Patil: Subgrid Scale Enhancements Assisted by Deep Learning (MINES ParisTech, CEMEF-CNRS UMR7635, Paris Sciences and Lettres University)
15:45 -16:15	K. Sakai: Machine learning analysis of acoustic emission signals during crack generation and propagation (OU)
16:15- 16:45	T. Taguchi: Etch Pit Analyses on Solid-State Nuclear Track Detectors with AI (OU)

CNRS = Centre national de la recherche scientifique, AMU = Aix Marseille University

OU = Osaka University

7 July (Thursday)	
11:00 - 16:00	Aix Marseille University Lab tour

8 July (Friday)	
09:00 - 12:00	ITER site visit