

Time	Day 1 25/1	Day 2 26/1	Day 3 27/1	Day 4 28/1
9.00 - 10.30	Introduction (G. Lapenta)	Neural Networks theory (G.J. Bex)	Coronal hole detection with U-Nets (S. Katakis/L. Liakopoulos)	Dst forecasting with NNs using AIDApy (S. Katakis/L. Liakopoulos)
	General description of AIDApy/AIDADB (J. Amaya)		Unsupervised solar image segmentation (S. Katakis/L. Liakopoulos)	Creating your own Use Cases in AIDApy (S. Katakis/L. Liakopoulos)
	Coffe break	Coffe break	Coffe break	Coffe break
11.00 - 12.30	11.00 - 11.30 Downloading data from AIDADB (G. Pedrazzi)	Unsupervised learning theory (G.J. Bex)	VDF Analysis with AIDApy (G. Lapenta)	Poster presentations from students
	11.30 - 12.30 Networking (Breakout rooms)		Reconnection detection using the Lorentz frame indicator and AIDApy (G. Lapenta)	
	Lunch break	Lunch break	Lunch break	Lunch break
13.30 - 15.00	Data processing and visualization (G.J. Bex)	CNN theory (J. Teunissen)	Classification of solar wind (J. Amaya) and magnetospheric regions using SOMs (ME. Innocenti)	Survey
		Supervised detection of reconnection events in 2D simulations (J. Teunissen)		Q&A and conclusions
	Coffe break	Coffe break	Coffe break	Coffe break
15.30 - 17.00	Use of a statistical toolbox to extract physical information from data (S. Servidio)	Replacing the SITL for MMS with NNs (J. Amaya)	Detection of magnetic reconnection in 2D/3D simulations using k-means (F. Califano/ G. Pedrazzi/ B. Agarwal)	
	Learning to fly: the AIDApy Virtual Instrument Package (D. Trotta)	Active region parameterization using AE/VAEs/GANs (J. Amaya)		
		Introduction to XAI (J. Amaya)		

	Data processing
	Supervised learning
	Unsupervised learning
	Applications to space data