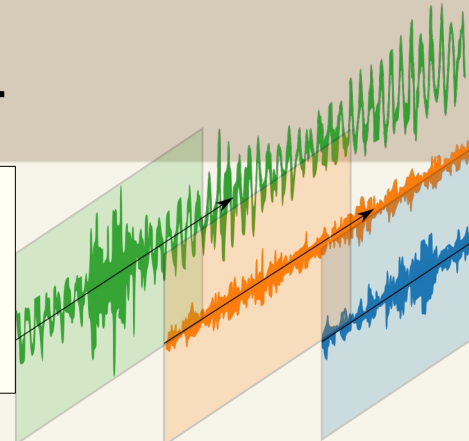


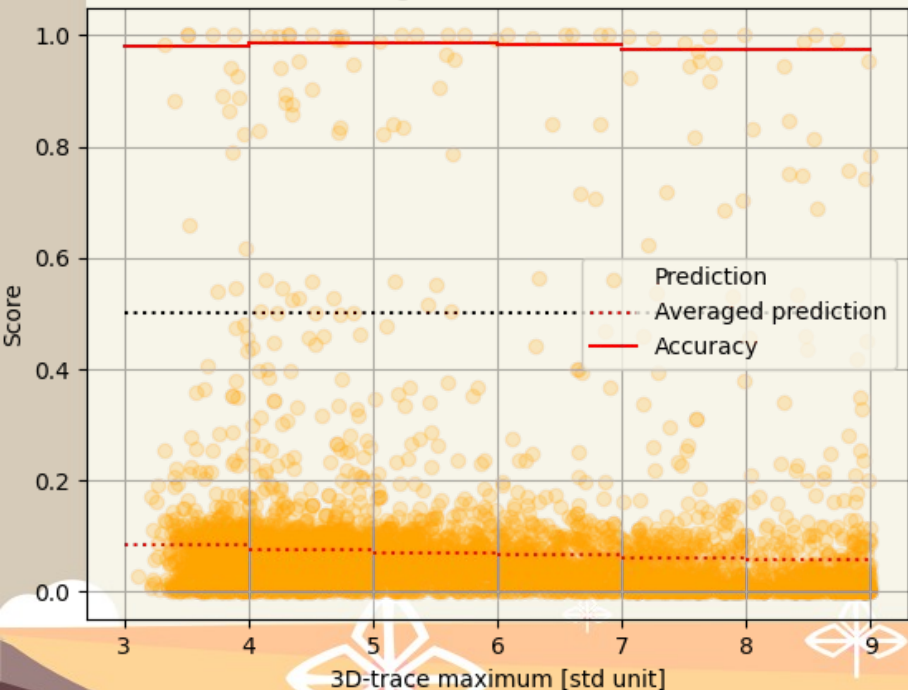
# GRAND *Giant Radio Array for $\nu$ Detection* First Level Trigger

Autonomous detection of **UHE  $\nu$** -induced air-showers via antenna arrays

- need a smart trigger to discriminate **background/air shower** radio signals with high purity
- convolutional neural network trained/tested with GP13 data (experimental + simulated)
- background transient rejection  $\sim 98\%$ , air shower transient selection  $> 86\%$  for  $\text{SNR} > 4$
- to be implemented on elec. board and tested in lab.(ressource)/on the field(sim. artifact?)



Background test dataset



Air shower test dataset

