# Weekly update

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## Teaching

• Second exam ready to print



## $\mathsf{QT}\ \mathsf{updates}$

- Summary of validation checkpoints
- Improving plot quality



#### Evolutionary loop

- 1 Bash script: evoLoop.sh
  - 1 Create a submission file based on the last run
  - Submit a dagman script
  - 3 Rank previous runs
- 2 Dagman script:
  - Submit a jdl
  - 2 Run a postcript to initialize the next step
- Open Stript:
  - 1 If generation 1: Generate random parameters
  - Else: Keep best config, generate new configs using top parameters, generate new configs using top parameters and mutating



#### Next steps

- Improve the creation of the first generation from a random setup to a setup close to a typical optimum.
- Add more hyperparameters to the evolution, some are static at the moment
- Investigate a good epoch number and generation number
- Add early stopping
- Investigate metrics and combinations of metrics
- Add more mutation based on probability and investigate different values for mutation probability

