

NEEDLE

- ▶ looked a little bit into the NEEDLE framework
<https://github.com/needle-sbi/needle-sbi>
- ▶ successfully ran the demo
- ▶ architecture is similar to CCE framework (Lightning, Hydra config) but adds workflow orchestration layer
- ▶ maybe some technical barrier to first learning to use framework but seems quite versatile when fully utilized
- ▶ includes some basic ensembling methods but not the wi fi ensembles (but could probably be implemented quite easily)
- ▶ seems like they have a bit more personpower working on it; implications for future of continuing work on the CCE framework?

HEP CCE framework developments

- ▶ <https://github.com/hep-cce/nsbi4hep>
- ▶ some refactoring of physics module to make the framework more analysis generic
- ▶ additions for HPO: distributed training strategies using multiple GPUs, fractional GPU usage for trials
- ▶ starting to work on implementing the option to do the wi fi ensembling
- ▶ changes currently live only on machine I am testing with (Polaris), will open pull request to get merged to main repo