

# HSF Software Tools and Packaging Group: Introduction

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# Software Tools & Packaging in 2020

- Meeting pattern and schedule?
  - Move to responsive meetings as updates/topics arise?
  - Training/Hands-on with packaging/profiling tools?
- Today:
  - Short/longer term packaging topics
  - Discuss/Capture topics for HSF Lund Workshop
  - Update on Spack Buildcaches

# Packaging: Ideas for Short/Longer Term Projects

- (Short) Write up “Good CMake/Build Practices” from 9th October meeting:
  - <https://indico.cern.ch/event/848215/>
  - Propose to write up initially as simple MD document under HSF/packaging repo on GitHub
  - Should we retire the project template in HSF/tools?
- (Short) Add any missing HEP packages to core Spack
  - Including identification of maintainers!
  - (Medium?) term: aim for frameworks “spack install gaudi”/”spack install art”?
- (Long) Implement “full lifecycle” for Spack packages through CI/CVMFS
  - New/Updated package: CI triggers to build the Spack binary package
  - CI pushes binary to a buildcache, optionally installed to CVMFS
  - Probably a case of identifying parts of spack (containerize/ci?) to contribute to/document?
- (Medium?) Collate/Demo packaging a HEP/Example C++ project in Conda
  - Including how to use CI to automate build/publication of binaries!

# HSF-WLCG Workshop in Lund, 11-15 May

- Registration now open!
  - <https://indico.cern.ch/event/867789/>
- There will be a BoF on Software Deployment on Monday morning:
  - <https://indico.cern.ch/event/867789/page/19711-software-deployment-bof-session>
  - Likely some overlap with Spack/IDEs topic, to be discussed
- We have a 1.5 hour parallel slot on Thursday at 9am, ***preliminary topics***:
  - Packaging with Spack
  - Profiling tools, focussing on those for Accelerators (semi-theme of workshop)
  - IDEs, integration with packaging/containers+remote/profiling tools, training, add ons...
  - ***Anything else?***
- Organise as short/lightning talks with demos/discussion?

# Upcoming events

- 5th CERN openlab/Intel hands-on workshop (24-26 March 2020 at CERN):
  - Main focus on oneAPI and code optimization
  - <https://indico.cern.ch/event/878418/>
    - Please register if interested
- Software Carpentry at CERN (24-27 March 2020):
  - Organized through HSF and IRIS-HEP
  - Excellent for newcomers and software non-experts
  - Registration will open at 10h CERN time on Friday 28 February
    - Limited number of spots, encourage relevant people to apply!
  - Also opportunity to volunteer to help with tutoring (get in touch w/ organizers)
  - <https://indico.cern.ch/event/882660/>
- Also see Graeme's HSF Forum emails regarding other relevant events