

# LIM

March 8, 2021

# Status of Nightlies

- dev[34], dev[34]python2
  - New: boost\_histogram ([SPI-1824](#)), tabulate ([SPI-1825](#))
  - Upgraded: Boost 1.75 ([SPI-1819](#)) , PyJWT 2.0.1 ([SPI-1820](#)), gdb 10.1 ([SPI-1831](#)), ACTS 6.0.0 ([SPI-1841](#)), pip 21.01 ([SPI-1840](#)), CORAL/COOL 3.3.5 ([SPI-1724](#)), spark 3.1.1 (dev3 only, [SPI-1839](#))
  - Removed: pyTimber, pyjapc, pjlsa, jpype, cmmnbuild ([SPI-1807](#))
  - Recipe changes:
    - dbg: Build root with “LLVM\_BUILD\_TYPE=Debug”
    - slows down Gaudi tests by factor 5-10
- devArm, dev[34]Cuda:
  - NTR

# Status of Releases

- LCG\_98python3\_ATLAS\_7 ([SPI-1822](#))
- LCG\_88b
  - superchic 4.01 ([SPI-1794](#)), → 4.02p1
  - Madgraph 2.92 ([SPI-1830](#))

# Preparing for LCG\_100

- Root 6.24.00 coming soon
- Please keep adding your wishes to [SPI-1799](#)
- Can we switch dev4 to root 6.24.00-patches?
- Upgrade to XrootD 5.1.0?

# Issues/Discussions

- Coral/Cool moving to ATLAS
- NXCals
  - Removing acc-py packages ([SPI-1807](#)) from LCG\_95python3\_nxcals
- building gcc with `–enable-frame-pointer`
- cuda 11.2 installed in contrib
- New LHAPDF sets: SPI-1827 SPI-1828 SPI-1829

# Instruction set proposed changes

*Proposed by M Clemencic to existing document HSF-TN/2018-01*

## 2.1 Architecture

...

In case we want builds targeting specific CPUs and we do not require compatibility with older CPU types, we can use architecture codenames like **haswell** or **skylake**. As of GCC11 and Clang 12 we can also use [Microarchitecture Feature Levels](#) like `x86_64_v2` to enable the SSE4.2 instructions set.

...

For CPU detection and compatibility checks we can use the Python package [archspec](#)

# Spack discussion points

- Root builtins vs. externals
  - LHCb has expressed a strong preference towards turning all `\_builtin` flags off
  - ATLAS is fine with the current situation
    - Question: will a build with all `\_builtin` flags off work for as well
- Who will be the point of contact from ATLAS and LHCb sides?
- What would be the timescale for investigation from the experiments side, so we can plan accordingly?

# Operating Systems et al.

- Linux Future update presentation at the ITUM Meeting last week:  
<https://indico.cern.ch/event/980347/#10-linux-future-update-on-stat>



# Next Meeting

- Monday, March 22, 2021