



# A build system for multiple package development utilizing Spack

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# Spack

- Spack is a flexible package manager for high performance computing
  - Linux, OSX, *and various supercomputing platforms*
- Has a rigorous model that includes multiple platforms, compilers, versions and variants
- Heavily uses RPATH
  - Relocatability through patchelf (Linux) or install\_name\_tool (OSX)
- Environment management is factored out
  - Multiple options: modules, dotkit, lmod and ups in development
- Has a community including many developers from multiple fields
  
- *For more information, see poster “Towards more common build tools - experience with using spack in HEP”*

# SpackDev

- SpackDev is a development manager for packages installable with Spack
  - SpackDev uses Spack
  - SpackDev assists in the compilation of one or more dependent packages
  - The packages themselves depend on neither Spack nor SpackDev
- Spack is designed to build and install
  - Incremental build are not part of the model
- SpackDev creates a build environment
  - Installs external dependencies
  - Enables incremental builds of dependent packages