## Installing CLHEP full version (optional)

• Create a directory for the installation procedure (ex.:clhep)



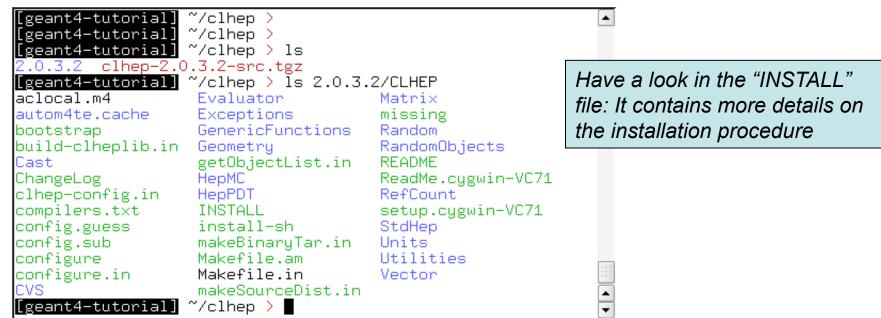
• Move the downloaded tar-ball into this directory



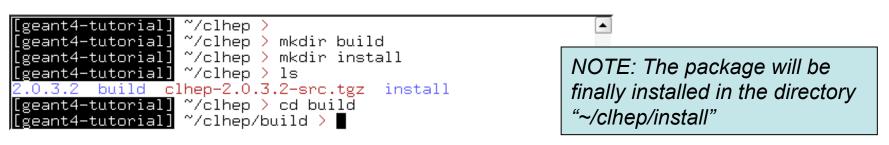
Unzip the extract tar-ball into this directory



• The extracted CLHEP package can be found in the subdirectory 2.0.3.2/CLHEP". Have a look at the content:



 Create two directories (inside our "clhep" directory), which are used for building and installing the package:



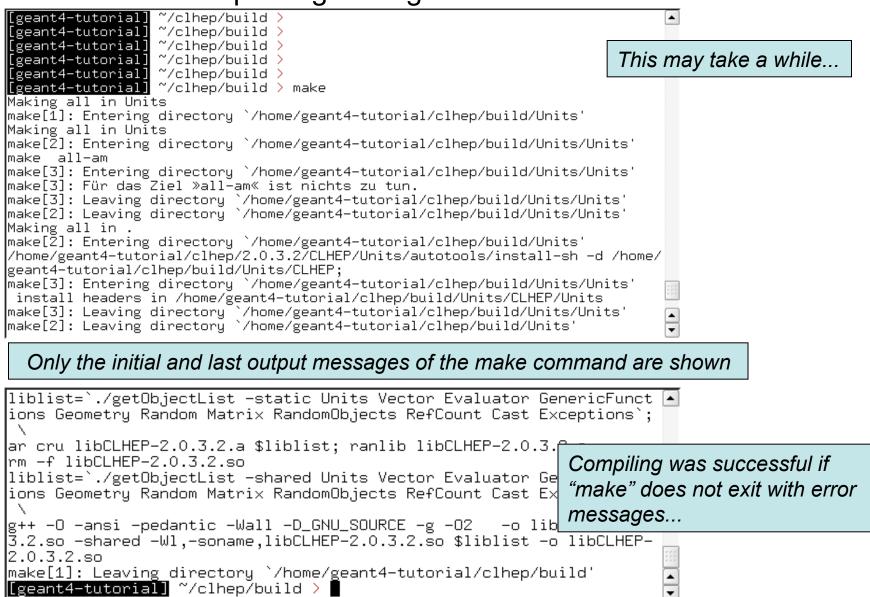
 Inside the "build" directory, call the CLHEP configure script (which is contained in the "2.0.3.2/CLHEP" directory).
NOTE: As argument you need to specify the directory, where CLHEP should be installed. Thus the full command to be called is: ../2.0.3.2/CLHEP/configure --prefix=/home/geant4tutorial/clhep/install



 The configure script checks for required programs and libraries, and creates some files, e.g. makefiles, and directories:

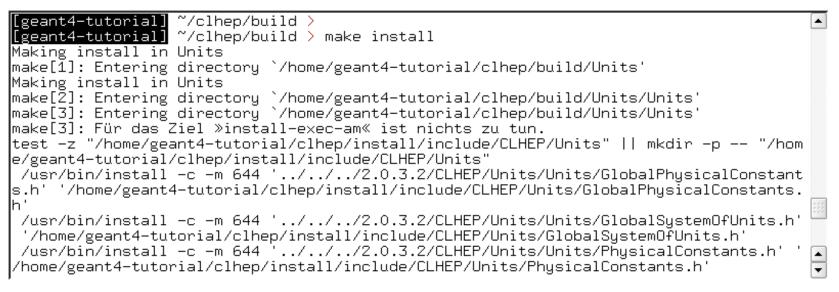
[geant4-tutoria	1] ~/clhep/build > 1] ~/clhep/build >			<b></b>
	1] ~/clhep/build > 1] ~/clhep/build > Evaluator Exceptions	ls makeBinaryTar Makefile	RandomObjects RefCount	
config.log config.status	GenericFunctions Geometry getObjectList 1] ~/clhep/build >	Matrix <u>R</u> andom	Units Vector	

## If no error occured in the configure process, one can start to • build the CLHEP package using the "make" command:



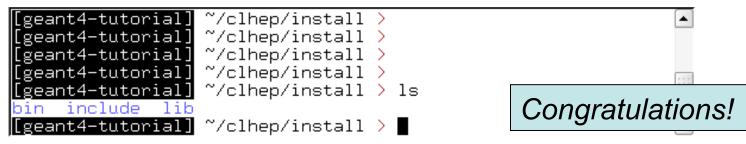
[geant4-tutorial] ~/clhep/build > 🗍

 Once the package was compiled successfully, CLHEP can be installed using the "make install" command:



 The CLHEP libraries are now installed in the directory "~/clhep/ install"

(NOTE: We specified the installation directory in the configure process; see the previous slides)



- What do the subdirectories in "~/clhep/install" contain?
  - include: Contains (in a defined directory tree structure) the C++ header files of CLHEP
  - lib: Contains the (static and shared) CLHEP libraries
  - bin: Contains configure scripts
- Finally, to save some disk space, you can remove the "build" directory, as well as the tar-ball and the source package

[geant4·	-tutorial] ~/clhep > du -sh *	
27M	2.0.3.2	
93M	build	
4,9M	clhep-2.0.3.2-src.tgz	
53M	install	
[geant4	-tutorial] ~/clhep > rm -r 2.0.3.2 build clhep-2.0.3.2-src.tgz	111
[geant4	-tutorial] ~/clhep >	-
		-