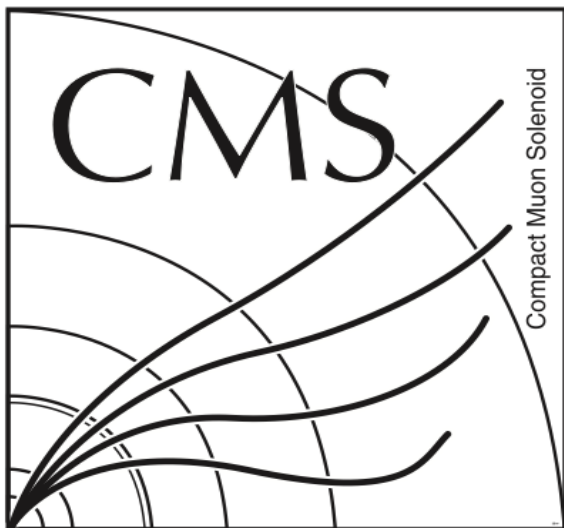


# psi46 Software Status



Jose Lazo-Flores

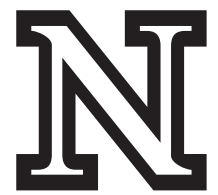


December 2, 2011

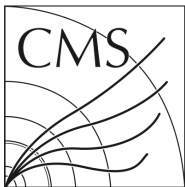




# psi46 Software: Status



- Unified software package now public
  - Platform independent
    - Works on SL4,5,6, Ubuntu, OS X and other linux distributions
- Available at CERN svn
  - Read access to all CERN users
    - `svn co svn+ssh://svn.cern.ch/repos/psi46expert/trunk psi46expert`
      - Use [username@svn.cern.ch](mailto:username@svn.cern.ch) if your CERN username differs from your local one
  - Write access will only be granted to developers
    - Let me know if you need write access
- Hypernews email list for software related topics
  - Subscribe to “Pixel psi46 Testboard” under the “Pixel Detector” category
  - If you do not have HN account, go to
    - <https://hypernews.cern.ch/HyperNews/CMS/add-member.pl>



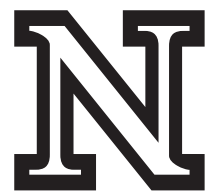
# psi46 Software: Compilation



- Compilation now easier than before
  - Included script checks for dependencies and makes configuration file
- Compilation needs the following packages:
  - D2xx drivers and USB libraries
  - ROOT -- use the latest stable release, go to:
    - <http://root.cern.ch/drupal/content/downloading-root>
    - ROOT compilation should be comparable to your architecture
      - You do not need to compile it locally
        - Install the compiled libraries and executables for your platform
  - Go to trunk/ directory and execute autogen.sh script to construct the configuration script -- ./autogen.sh
- Run the configuration script and compile
  - ./configure
  - make
- Optional: install executables centrally
  - make install (needs root access)



# psi46 Software: Issues



- This version needs to be stress tested
  - We have tested some functionality but not all
  - Check all programs within psi46expert
    - Pretest, Fulltest, pixelMap, Dac-dac, SCurve, etc...
  - Run takeData with and without external trigger input
    - psi46hvOn, psi46hvRead and psi46hvOff only work with keithley 2400 series power supplies
- Works with module, single ROC and plaquettes
  - Template configuration files included for all three setups
    - Look in data/
    - Let me know if these setting do not work
- Report all bugs to the HN emailing list
  - Objective is to get help from all of the users
- Please help to document the software
  - One you learn how a function works, write it down and post it on HN
    - We want to compile a psi46 software document