INSPIRE and Data Preservation

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SLAC - INSPIRE

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INSPIRE

- Next generation HEP information system
- Replaces aging SPIRES system with Invenio technology
- Run by CERN, DESY, Fermilab, SLAC
- Central location for HEP information





Release Plans

- INSPIRE Coming Soon to a Computer near You
 - Public Beta Real Soon Now (~1 Month)
 - Full release early 2010 (Feb/March?)
- Already some features released
 - Helpdesk
 - Classification





INSPIRE and DPHEP

- Storing documentation
- Storing other objects
- Linking with papers
- Providing simple interface to get information to the external world
 - Ensuring that HEP information plays well with others





Experiment Documentation

- Notes series
 - Pretty trivial to capture
 - Can be password protected or embargoed
- Other flat file documentation
 - Submit it, no problems





Wikis

- "Shadowing" internal wikis
 - Backup archive on INSPIRE 3rd party site
 - Goes live in frozen state when collaboration wishes
- Harder to do, but potentially very useful...
 - Some tools available, some need to be written



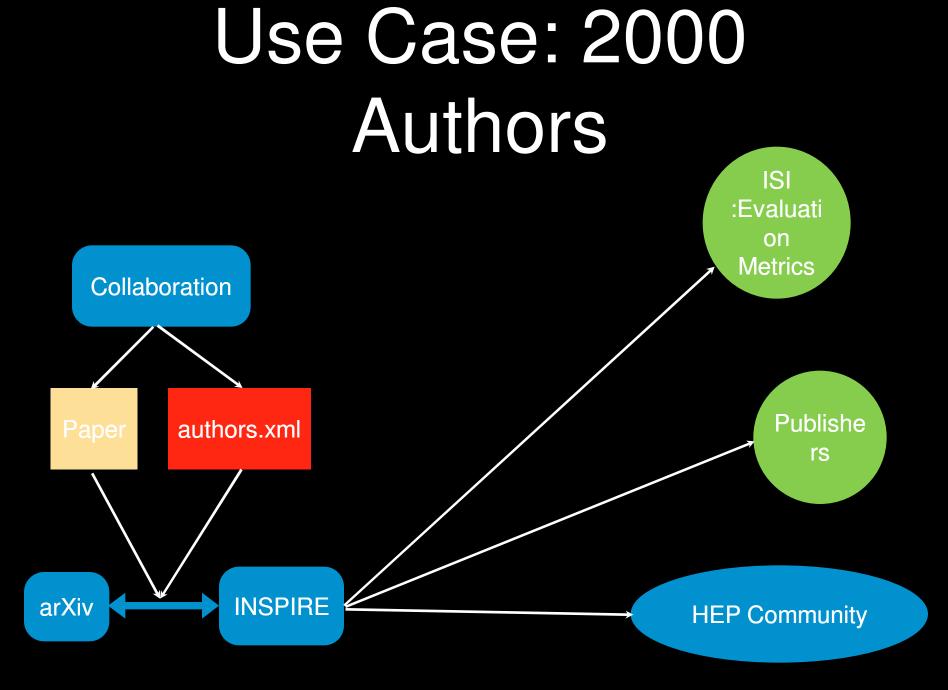


Other Objects

- Will people actually store stuff?
- Look at a use case that's already happening:





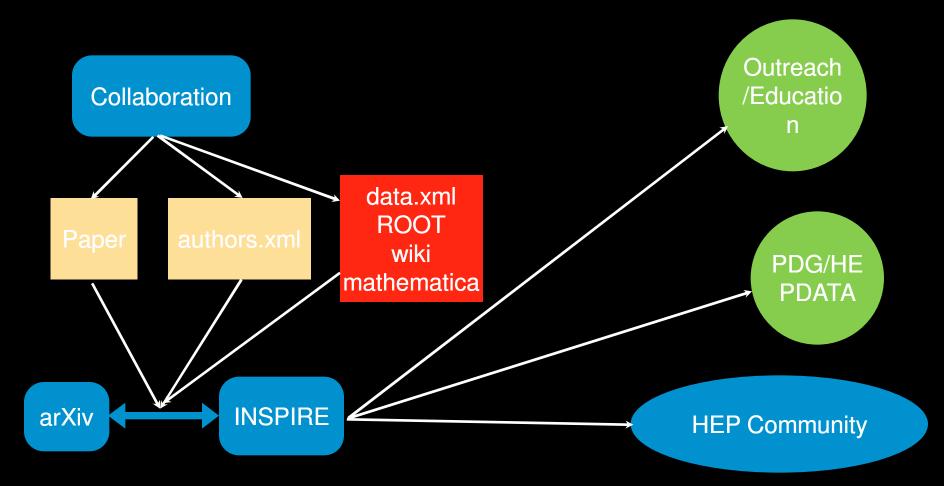


Author Lists

INSPIRE Standardizes Format Uses IDs to solve name ambiguities Removes much manual labor Enables sharing with external entities from a central source Authors/collaborations are already contributing! CMS, MiniBooNe, IceCube, CDF, Auger, MIPP already, others coming soon

- <authorList> <collaboration>CDF</collaboration> – <authorOrganization> - <author> <name>Aaltonen, T.</name> <authorID>INSPIRE-00010138</authorID> </author> <organization>hip.fi</organization> </authorOrganization> – <authorOrganization> - <author> <name>Adelman, Jahred A.</name> <authorID>INSPIRE-00041460</authorID> </author> <organization>uchicago.edu</organization> </authorOrganization> – <authorOrganization> - <author> <name>Akimoto, T.</name> <authorID>INSPIRE-00041459</authorID> </author> <organization>tsukuba.ac.jp</organization> </authorOrganization>

Why stop with authors?



What to store?

- Paper-level data
 - Numbers behind figures, tables
 - XML, ROOT, CSV
- High resolution images
- Mathematica Notebooks
- Code





Depositing Stuff

- Deposit in INSPIRE (or arXiv .. seamless)
 - Importance of trusted 3rd party
- INSPIRE would be able to provide embargo period (a la CMS/ATLAS "push to publish")
- Continue our current philosophy:
 - Accept just about anything, but work with providers to optimize and standardize formats
- INSPIRE already uses OAI-PMH for ingestion





Summary

- INSPIRE will soon get experimental note series
- INSPIRE already gets feeds of XML author lists
- A bit of work can re-use this infrastructure for high-level data (Data from figures/tables, ROOT, Mathematica, etc.)
- With work can extend to allow embargoes, and wiki tracking/ingestion



