MINERvA Collaboration

- ~80 Collaborators,
 - 21 Total Institutions, 15 from US
 - 3 US Undergrad Institutions
 - Currently 13 post-docs, up from 9 in FY09, 15 named for FY11
 - Of 13 postdocs, 3 are NSF-funded,
 2 @FNAL, 2 University funded,
 1 Brazilian fellowship, 5 DOE OHEP
- 47 FTE physicists (including undergrads)
 - 8.4 FTE from foreign institutions
 - 4.8 FTE from Fermilab in FY10
 - 33.8 FTE from US Institutions
 - 10.1 Post-docs in FY10



By-laws require at least 1/3 "research FTE" for full membership

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MINERvA's Recruiting Status

- Does MINERvA attract enough post-docs and Fellows?
 - The number of post-docs on MINERvA has increased by 4 over the past year:
 - W&M, UT-Austin, Northwestern, Fermilab
 - Other institutions maintaining their post-doc levels
- Are there international visitors or sufficient participation from abroad on the new projects?
 - One new foreign institution on MINERvA in the past year (University of Santa Maria from Chile)
 - MINERvA benefits from strong Latin American visitor program (long term (>6 month) visits for ~5 students, 1 post-doc, and 2-month stays for several faculty)



Recent FNAL MINERvA group Activities (FTE Fractions, from Newest to Oldest)

- Expected Totals: 4.85/4.45 FTE in FY10/FY11
- Jyotsna Osta (100%/100%)—post-doc, commissioning, calibrating test beam detector and data taking, analysis
- Ray Stefanski (60%/75%)
 Test beam design, survey and magnetic field checks, shift coordinator after 2/10
- Dave Schmitz (100/100%)—Lederman Fellow, code releaser, Reconstruction coordinator, co-Run Coord. until 7/10
- Dave Boehnlein (50%/0%)—Shift coordinator until 2/10, project documentation coordinator
- Debbie Harris (95%/95%)—co-spokesperson as of 2/10, MINERvA project manager
- Jorge Morfin (80%/75%)—co-spokesperson until 2/10, test beam, nuclear targets, Latin American Visitor Program



Budgeted vs Actual Effort Reported Fermilab Physicist Labor in FY10, FY11 projection

Budget	Research Associate	Scientist	Total
FY10	0.9	2.5	3.4
FY11	2.0	2.8	4.8

Actual / expected Effort	Research Associate	Scientist	Total
FY10	2.0	2.85	4.85
FY11	2.0	2.45	4.45

FY11 budget "caught up" with FY10 actuals, based on post-doc joining group in FY10. Still recruiting FNAL post-docs



Computing Support of MINERvA

- Fermilab is transitioning to a model of coordinated support across Intensity Frontier
 - An ongoing transition doesn't help an operating experiment like MINERvA the way it does a future expt
 - Have had long term (since 2006) unmet request for MINERvA CD support coordinator
 - MINOS has 2 full-time CD people doing this job for them
 - This has slowed down progress
 - For example, scaling from 32 cores to the grid has caused database contention problems. Joint effort by Roch / USM / NU / FNAL is close to solving this
- Rick Snider, CD Physicist on CDF, is strongly considering joining MINERvA for FY11
 - But not clear how much FTE, FY12 even less certain

Current plan for FY11 Computing Hardware for MINERvA

- Cut Disk Space request by 50%
 - This will limit MINERvA's ability to have more Monte Carlo statistics than Data statistics
 - Risk in putting data only on tape, delays in processing
 - Example of Mitigation: dCache, but integration with our production and user analysis most efficiently done by CD personnel who have not been assigned to us
- Cut Interactive CPU by 50%
 - MINERvA has more people working on analyses than Interactive cores in Fermilab cluster
 - Lots of data now, huge increase in analysis activity
 - Lack of Interactive CPU already hobbles MINERvA's ability to do real time event processing and keep up with data monitoring



Summary, Personnel

- MINERvA collaboration has a working detector and beam and people excited to do the physics
 - Recent strengthening of the core of post-docs and most are resident at Fermilab where the action is
 - Recent DOE OHEP and NSF NP travel supplements to University groups very helpful in maintaining contact between the FNAL resident core and the rest of the collaboration
 - Presented first data/monte carlo distributions at ICHEP from antineutrino data taken in late 2009



Summary, Computing

Computing Support remains a concern

- We are getting substantially more help than in years past but we are still catching up while the data is rolling in
- Still have our core of postdocs and students too heavily taxed working on computing infrastructure tasks which could be more efficiently done with better FNAL/CD support
- Dedicated coordinator would help to make best use of resources available at Fermilab

