

Intensity Frontier Experimental Program

↳ Parameter Measurements

Neutrinos

- θ_{13} (✓✓✓)
- $\theta_{23}-\pi/4$
- Mass hierarchy
- CP violation
- Dirac or Majorana?
- Cross Sections

Muons

- g-2

↳ Paradigm testing

- Sterile neutrinos?
- Non standard Interactions?
- Lorentz violation?
- CPT violation?
- Non-Unitarity of MNS matrix?
- EDM

ANLHEP Involvement

MINOS

Double Chooz

g-2

NOvA

LBNE

Members

ANL Full-time Staff

Maury Goodman
Richard Talaga
Steve Magill
Zelimir Djurcic
Jonathan Paley
Peter Winter

Postdocs

Himansoo Sahoo
Lisa Goodenough
Ioanna Anghel (w/Iowa State)
Louise Suter (Jan. 2013)

Faculty, Former Staff

Mayly Sanchez (w/Iowa State)
Phil Schreiner (STA)
Tom Fields (STA)
Dave Ayres (STA)
Paul Bloom (North Central College)
Leon Ely (Chicago State)

Students

Guang Yang (Ph.D. IIT)
Enrique Ariatta-Diaz (Ph.D. Mich. State)
Ryan Murphy (North Central College)
Wesley Beck (IMSA)
Sagar Punhami (IMSA)

Future IF Program

LBNE

Laser calibration of LAr TPC
Photon detection
Simulation and Reconstruction

g-2, $\mu \rightarrow e$

Increase ANLHEP participation

EXO, NEXT (NEXT-100)

Xenon-based neutrinoless double beta decay, dark matter search

Other Possibilities

LArIAT, INO, Daya Bay 2, Supernova ν , Daeδalus, SciNOvA, PINGU, . . .