



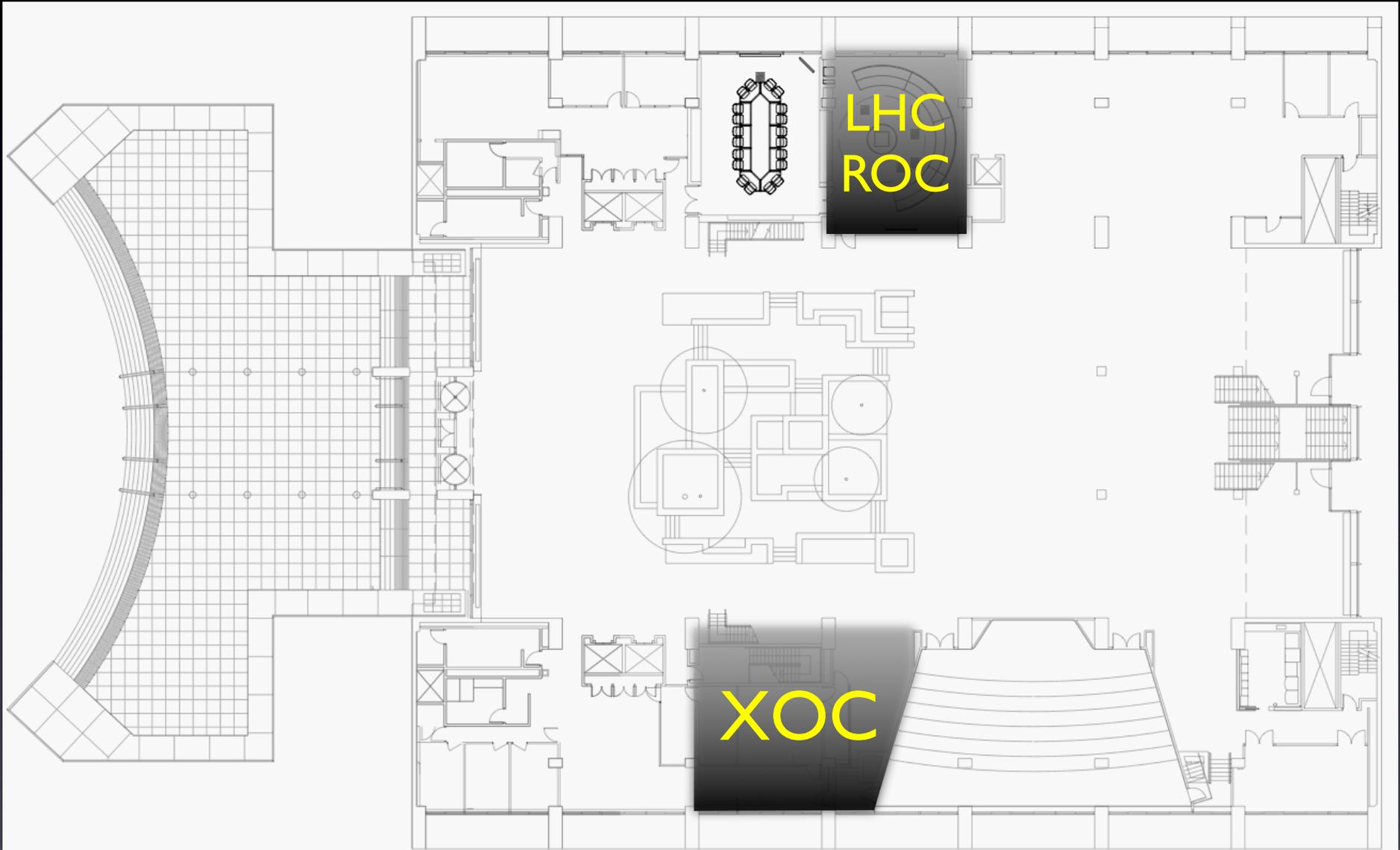
# Experiment Operations Center (XOC)

Erik Gottschalk

# Overview

- Proposed location of the XOC in Wilson Hall
- Purpose
- Functions
- Justification
- Stakeholders
- Summary

# Proposed Location







# XOC Purpose

The purpose of the XOC is to combine the operations functions of *Intensity Frontier* experiments into a single, centrally-located and optimized space.

- LBNE, MINERvA, MicroBooNE, MiniBooNE, MINOS, Mu2e, NOvA...

# XOC Functions

- The primary function is to provide a single, centrally-managed location that can accommodate the hardware and software needed to operate the experiments.
- The XOC would provide a communications focal point for Fermilab operations staff and experimenters.
  - Operators in the Main Control Room (MCR) will have a single location to contact and communicate with the experiments.
  - Experimenters will be able to get information on the operational status accelerator components and experiments.
- A new education and outreach venue to highlight Fermilab research at the Intensity Frontier.

# XOC Justification

- Benefits of a single, centrally-managed operations center:
  - Potential cost savings from standardized hardware and software. For example, updating operating systems for console PCs, and applying security patches.
  - Cost savings from shared support personnel by co-locating computing & networking equipment in the same space.
  - Simplify the ability to mitigate problems by using shared infrastructure (for example, easier to resolve problems caused by power outages and network outages).
- Benefits of a shared neutrino control room (WH-12) have been demonstrated, but a larger space is needed to accommodate additional experiments.
- Experimenters working in the XOC will be in close proximity to each other, so they can share insights on commissioning and operations. For example, beam conditions for one experiment are likely to be of interest to others who share accelerator beamline components.
- Location in the Atrium is well suited for education and public outreach.
  - For example, the ROC attracts considerable attention from visitors and VIPs.

# Stakeholders

- Intensity Frontier experiments (LBNE, MINERvA, MicroBooNE, MiniBooNE, MINOS, Mu2e, and NOvA)
- Fermilab Directorate
- Fermilab Division Management (Accelerator, Computing, and Particle Physics Division)
- Fermilab Engineering Services Section (FESS)
- Fermilab Experimental Physics Projects Department
- Fermilab Neutrino Department
- Fermilab Office of Communication
- Fermilab Science Education Office
- Department of Energy Office of High Energy Physics
- University researchers...

# Summary

- Proposed location of an experiment operations center (XOC) for *Intensity Frontier* experiments.
- Purpose, functions, justification...
- We have identified a number of stakeholders. Are there others?
- The next step is to meet with stakeholders and develop a shared vision and goals for the XOC.