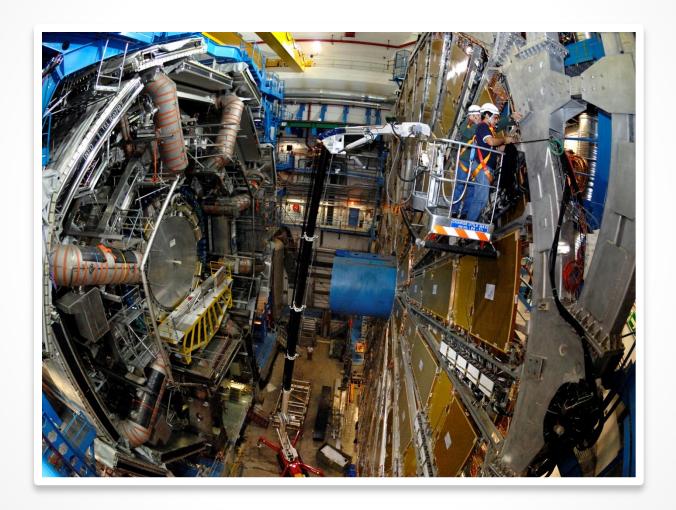
# Analysis Flow at the LHC

University of Michigan REU at CERN Kristina Krylova

#### Building of the Detector



#### RAW data





Dr. Paul Bell

Dr. Stephen Gibson

#### Reconstructed Data

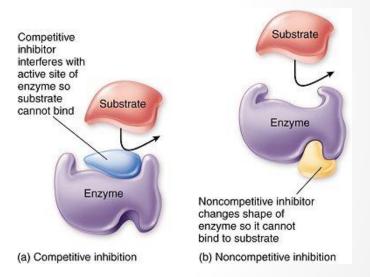
Physics

## Why Gauge Couplings?

Deviations from SM gauge couplings

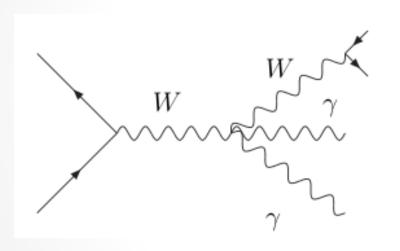


New physics



# Carrying out the Analysis

### Signal Extraction



- Get analysis started
- Use VBFNLO MC theoretical understanding
- Use AlpGen MC for detector and parton shower corrections
- Compare with 2011 (possibly 2012) data
- Issue: low cross section, huge background

#### In the next months:



## Analysis Approval





