

Status of E-906/SeaQuest

– an unpolarized fixed-target Drell-Yan experiment



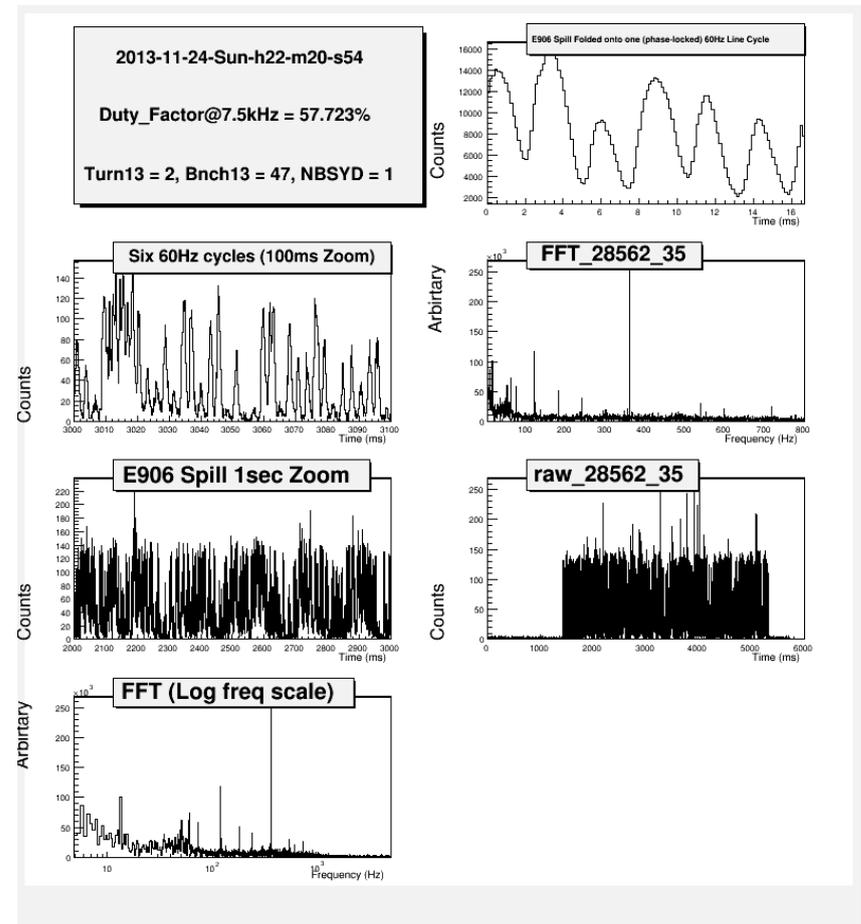
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Beam Status

- **Opportunistic controlled access for repair of NM1 box SWIC (11/18):**
 - extensive study of low efficient D1 and D2 wire chambers
 - QIE inhibit integrated into trigger system
 - trigger inhibit(spill structure)
- **Controlled accesses requested by SeaQuest:**
 - **11/24** (~ 2h) to add delay cables for each PMT to define trigger timing
 - **11/22** (~ 2h) removed NIM amplifiers for H1 and H2
 - numerous short controlled accesses to fix spectrometer (broken PMT base, problem level-shifter board, inspected gas flow of D1)

Analysis of the spill structure

- **goal:** provide useful spill-by-spill information to the Accelerator Division
- commissioning our Cerenkov-based beam intensity monitor
- working on normalization → number of protons per bucket
- ongoing measurements reveal:
 - **very high frequency structure in the beam**
 - **as well as low frequency structure**
 - strongest frequency component is 360Hz
- coordinating spill-structure analysis with Accelerator Division

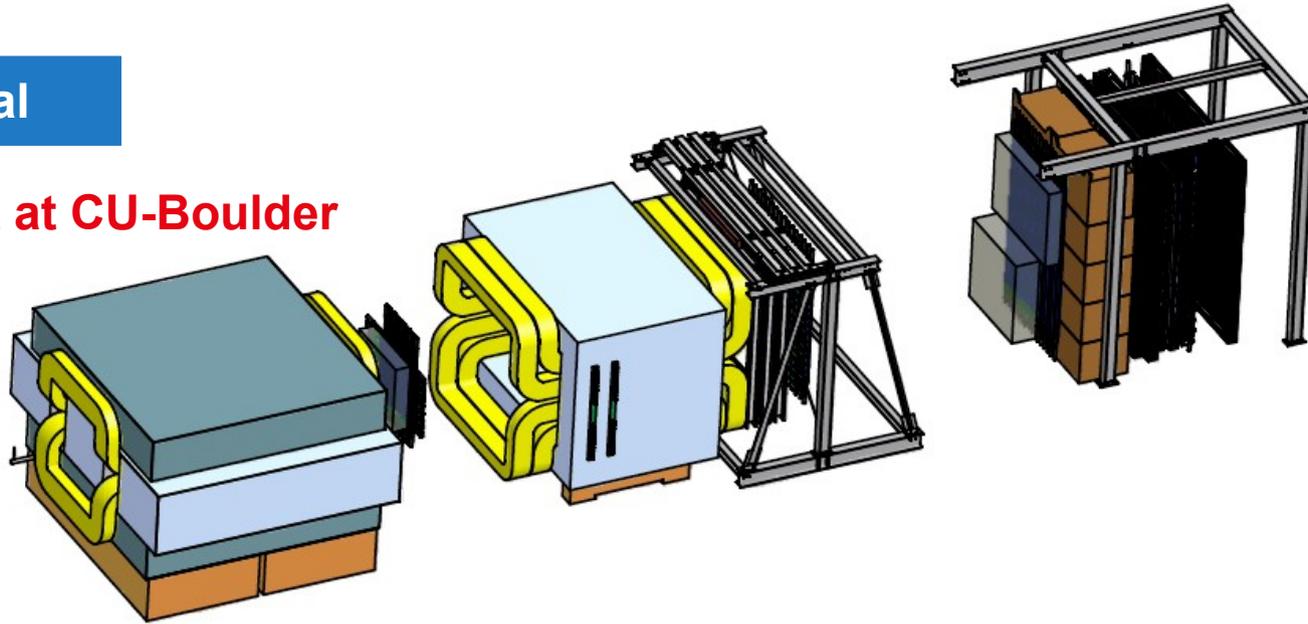


<http://e906-gat3.fnal.gov:8081/seaquestacc>
(in development)

Spectrometer Status and Plans

Operational

new D1 built at CU-Boulder



Target

start calibrating target position during this week

Magnets

FMAG (2000A) and KMAG (1600A) operational, no cooling problems

Hodoscopes

MIPP studied, calibrated H1 – H4 in HV scans, work on timing, in process of adding delay cables → trigger timing

Drift Chambers

change gas adiabatically from Ar:CO₂ to P08:CF₄
chamber plateauing scheduled for this week

DAQ

continuous data taking, stable operation at low and high rates

Special problem section

- **11/24, 4:30 a.m. – 7:30 a.m.: network outage**
 - switch s-exp-e906-1 hung after a brief power outage
 - switch was rebooted and network restored