

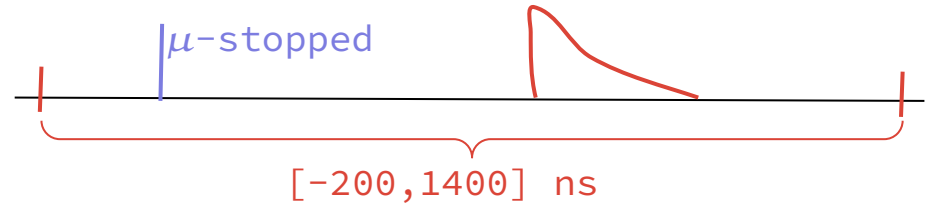
# RANDOM COINCIDENCES STUDY WITH TEST PULSER

**Elisabetta B. (TUM)**  
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# PREMISES

- Proper Test Pulser settings only from 28 Oct: test pulser sent to independent FADC channel (channel 10 in ALPACA)
- Can study Random Coincidences:
  - All Se76 data (Oct 28 - Nov 4, all se76 ALPACA runs)
  - Last runs of Ba136 data (Nov 4-7, ba136-08 and ba136-09 in ALPACA)

# TEST PULSER & RANDOM COINCIDENCES

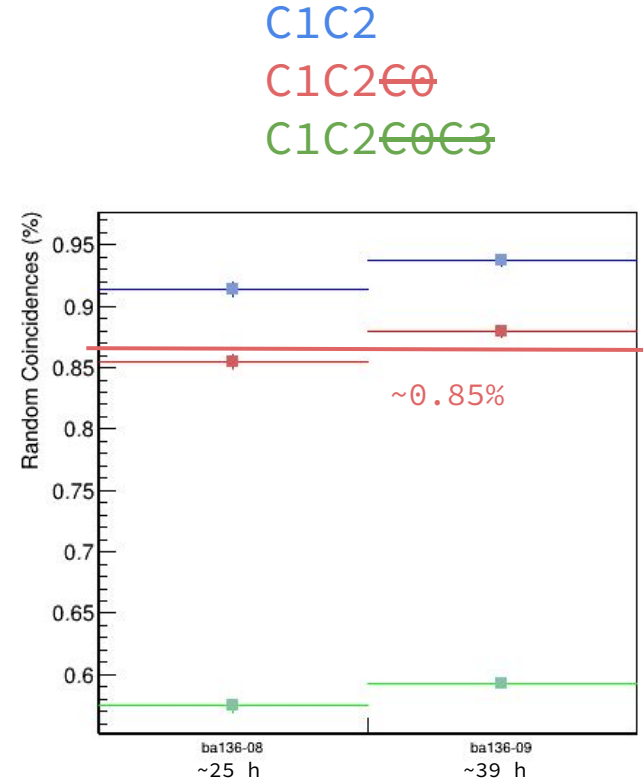
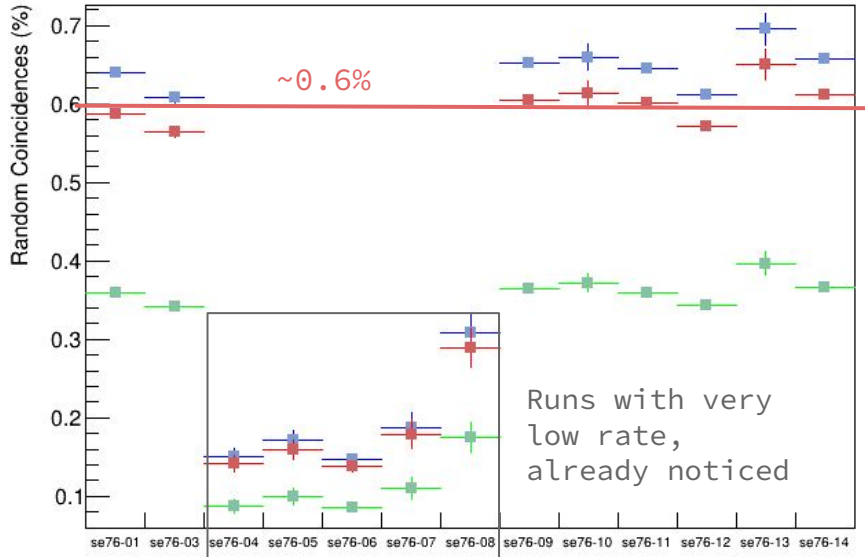


- **Test Pulser events** = Artificial pulses sent to the germanium detectors with a certain rate
- Coincidences between the test pulser events and the muon stopped in the target are **Random Coincidences**

Look for TP events passing the trigger criteria:

- C1C2
- C1C2~~C0~~
- C1C2~~C0C3~~

# RESULTS PER RUN



- Random coincidences overall < 1%
- Slightly higher in Ba136 runs
- Study over time ongoing (big picture unchanged, but maybe nice for conceptual paper)