# Stave production monitoring

Ivan Ravasenga, Bogolyubov Institute for Theo. Phys.

23/09/2019

Monitoring from January 2018 to 23/09/2019

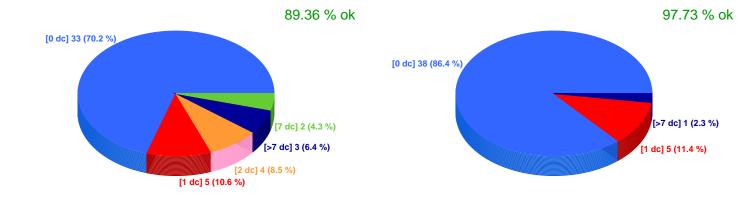
Stave meeting

# HS monitoring

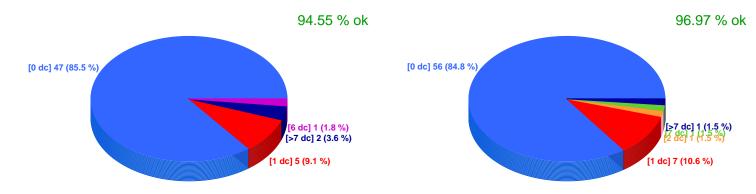
# **HSs of previous week**

**HSs** of this week

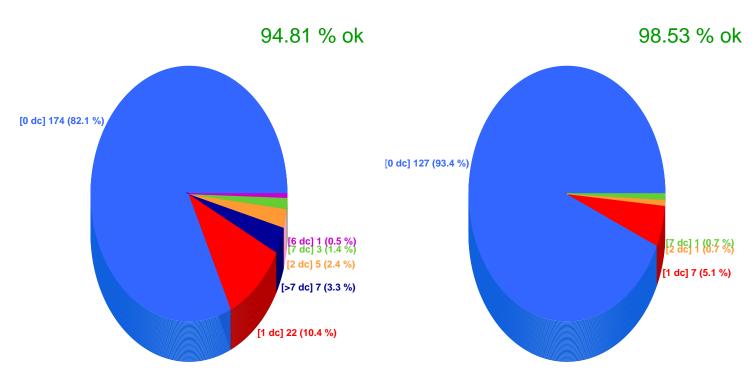


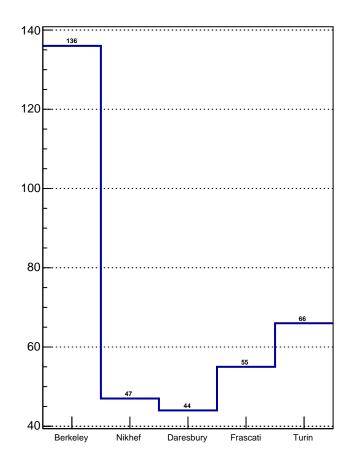


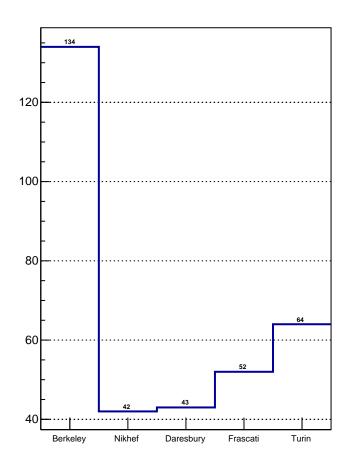


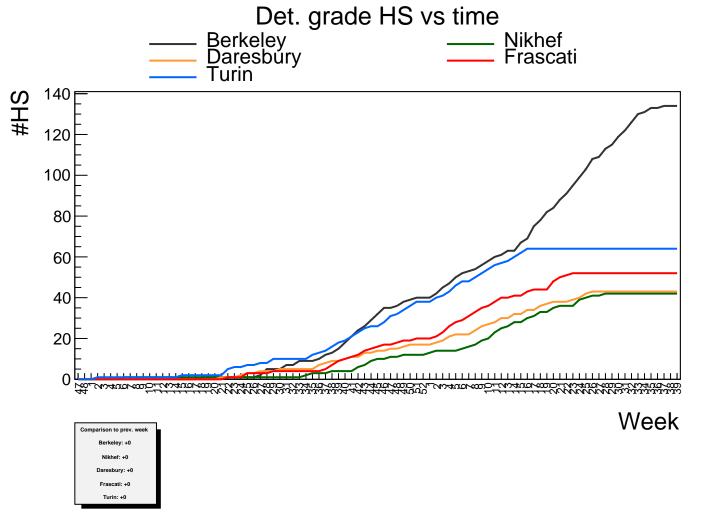


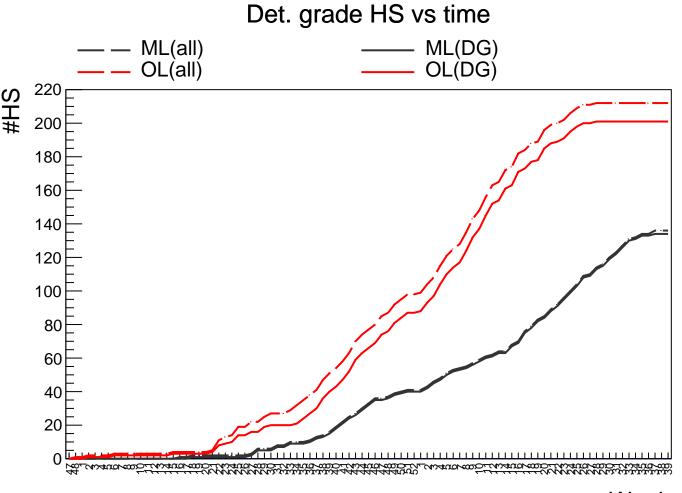
HS - OL HS - ML

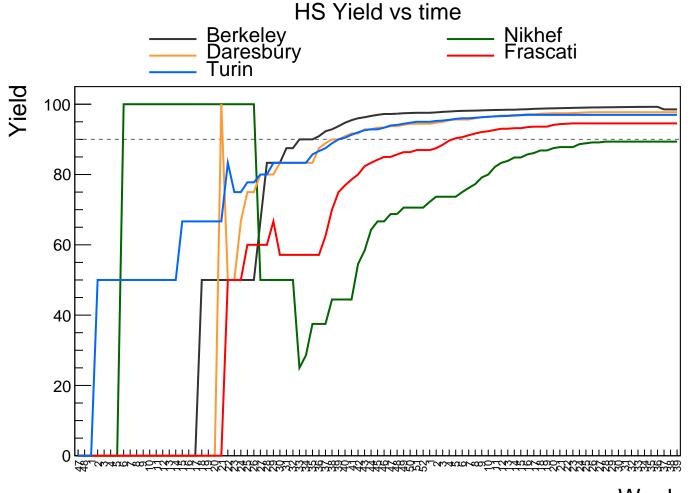




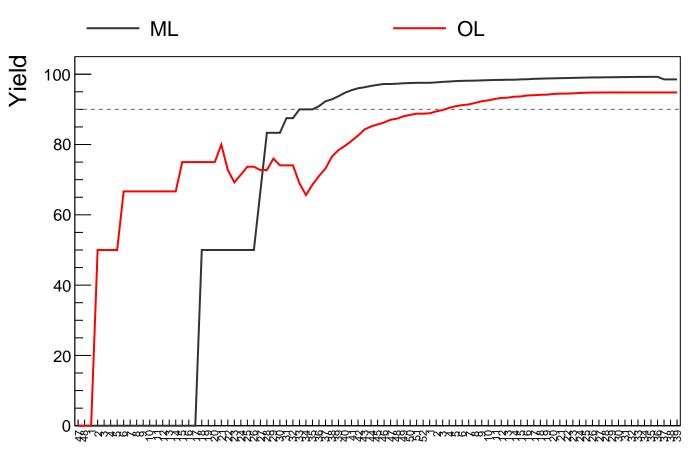








### HS Yield vs time



Stave monitoring

# Staves of previous week

B-ML-Stave-065: (U,L)=(0, 0) bad chips

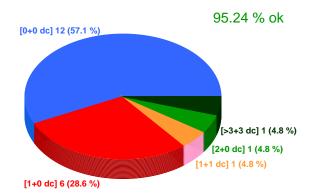
Staves of this week

[0+0 dc] 10 (52.6 %)
[>3+3 dc] 2 (10.5 %)

[1+0 dc] 3 (15.8 %)

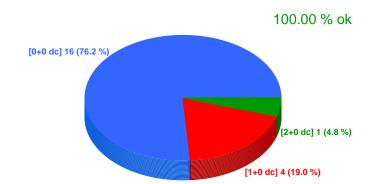
Stave - Nikhef

Stave - Daresbury

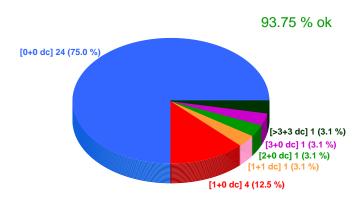


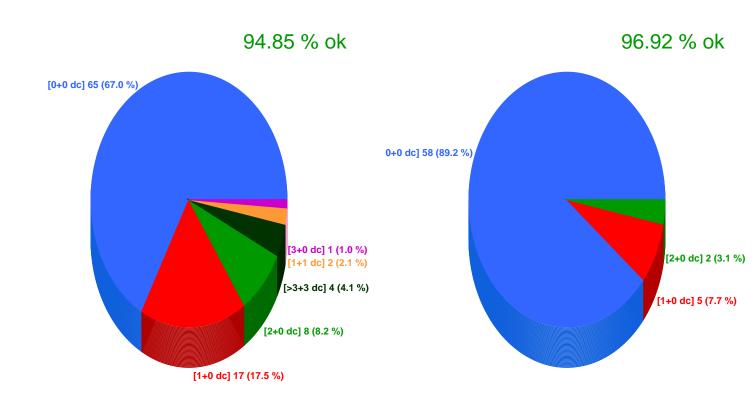
Stave - Frascati

[2+0 dc] 4 (21.1 %)

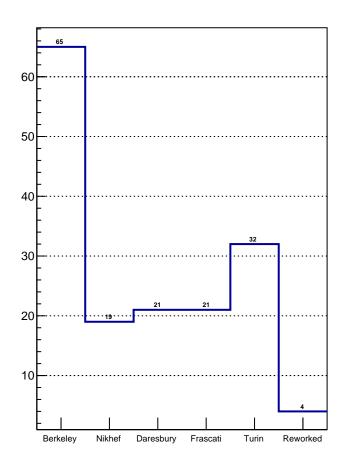


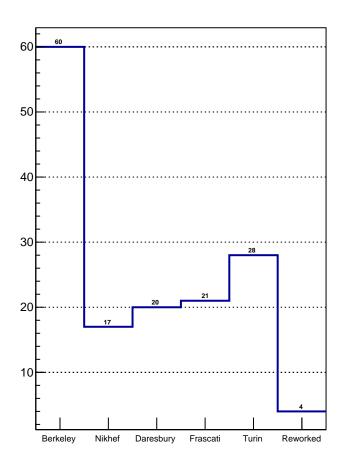
Stave - Turin





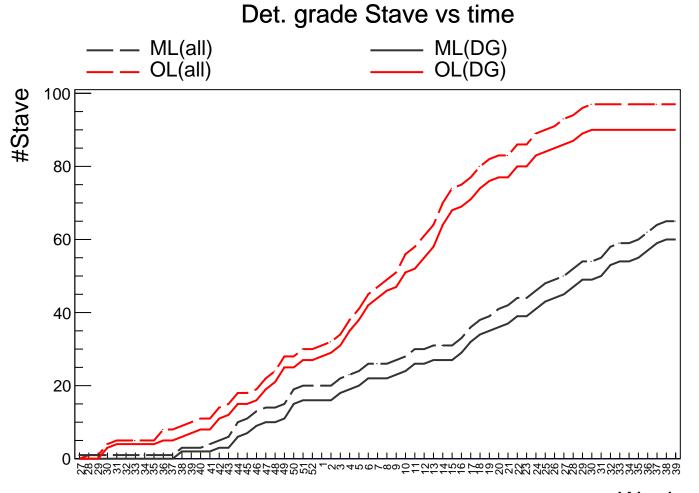
### Det. Grade Stave

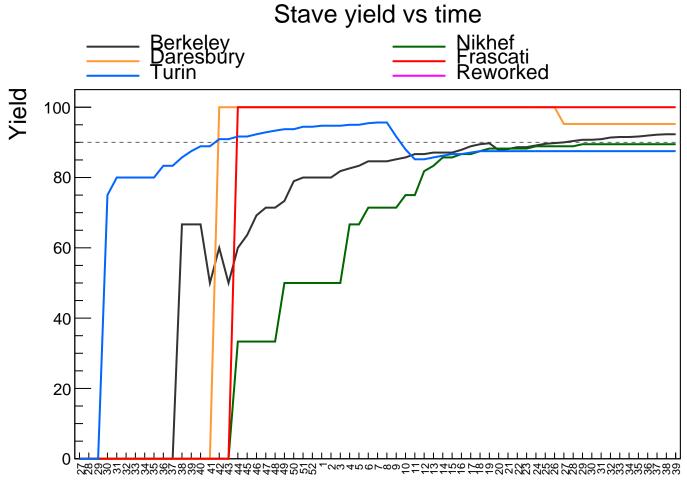




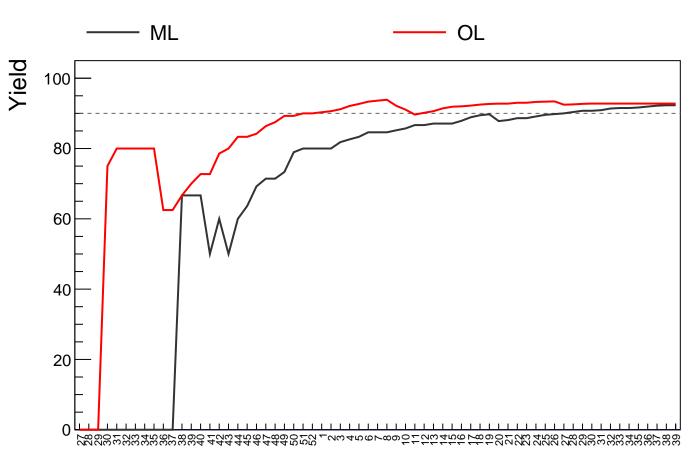
Det. grade Stave vs time Berkeley Daresbury Turin Nikhef Frascati Reworked 70 #Stave 60 50 40 30 20 10 *ᢗ*オᲥᲡᲡᲡᲡᲓᲡᲓᲓᲓᲓᲓᲓ 4 444 444 444 ᲓᲡᲡ ᲡᲓᲓᲔ-ᲥᲡᲡᲧᲝᲠᲮᲓᲓᲔ 1ᲥᲡᲡᲧᲠᲓᲮᲓᲓᲔ-ᲥᲐᲡᲧᲡᲓᲮᲓᲓᲔ-ᲥᲡᲡᲧᲡᲓ ᲡᲓᲓᲔ 1ᲥᲡᲡᲧᲡᲓᲡ ᲓᲓᲓ Week Comparison to prev. weel Berkeley: +0 Nikhef: +0 Daresbury: +0 Frascati: +0 Turin: +0

Reworked: +0





### Stave yield vs time



```
Production rate (October 2018 - prev. week)**
            \rightarrow Berkeley: 1.27(all) -- 1.18(DG)
             → Nikhef: 0.35(all) -- 0.35(DG)
           \rightarrow Daresbury: 0.43(all) -- 0.41(DG)
            → Frascati: 0.43(all) -- 0.43(DG)
     \rightarrow Turin: 0.79(all) -- 0.69(DG) \rightarrow Prod. ended
                 OL: 2.00(all) -- 1.87(DG)
                 ML: 1.27(all) -- 1.18(DG)
Rework rate (from June 1st, 2019): 0.24(all) -- 0.24(DG)
```

\*\*Christmas holiday excluded (2 weeks)

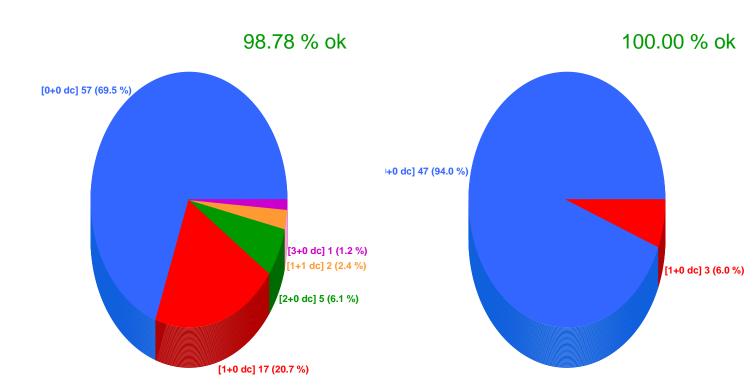
```
Production rate 2019 (month by month)**
                 January
    → Berkeley: 1.00(all) -- 1.00(DG)
     → Nikhef: 0.50(all) -- 0.50(DG)
   → Daresbury: 0.75(all) -- 0.75(DG)
     → Frascati: 1.00(all) -- 1.00(DG)
     → Turin: 0.25(all) -- 0.25(DG)
         OL: 2.50(all) -- 2.50(DG)
         ML: 1.00(all) -- 1.00(DG)
                February
    → Berkeley: 0.80(all) -- 0.80(DG)
     → Nikhef: 0.20(all) -- 0.20(DG)
   → Daresbury: 0.80(all) -- 0.80(DG)
     → Frascati: 0.80(all) -- 0.80(DG)
      → Turin: 0.80(all) -- 0.60(DG)
         OL: 2.60(all) -- 2.40(DG)
         ML: 0.80(all) -- 0.80(DG)
                 March
    → Berkeley: 1.00(all) -- 1.00(DG)
     → Nikhef: 1.00(all) -- 1.00(DG)
    → Daresbury: 0.40(all) -- 0.40(DG)
     → Frascati: 0.60(all) -- 0.60(DG)
      → Turin: 1.00(all) -- 0.40(DG)
        OL: 3.00(all) -- 2.40(DG)
         ML: 1.00(all) -- 1.00(DG)
                  April
    → Berkeley: 1.40(all) -- 1.40(DG)
     → Nikhef: 0.80(all) -- 0.80(DG)
   → Daresbury: 1.00(all) -- 1.00(DG)
     → Frascati: 0.60(all) -- 0.60(DG)
      → Turin: 0.80(all) -- 0.80(DG)
         OL: 3.20(all) -- 3.20(DG)
         ML: 1.40(all) -- 1.40(DG)
    → Berkeley: 1.60(all) -- 1.40(DG)
     → Nikhef: 0.40(all) -- 0.40(DG)
   → Daresbury: 0.40(all) -- 0.40(DG)
     → Frascati: 0.60(all) -- 0.60(DG)
      → Turin: Production ended
        OL: 1.40(all) -- 1.40(DG)
         ML: 1.60(all) -- 1.40(DG)
                  June
    → Berkeley: 1.25(all) -- 1.25(DG)
     → Nikhef: 0.25(all) -- 0.25(DG)
   → Daresbury: 0.50(all) -- 0.50(DG)
     → Frascati: 0.50(all) -- 0.50(DG)
      → Turin: 0.00(all) -- 0.00(DG)
         OL: 1.25(all) -- 1.25(DG)
         ML: 1.25(all) -- 1.25(DG)
```

Stave reception @CERN

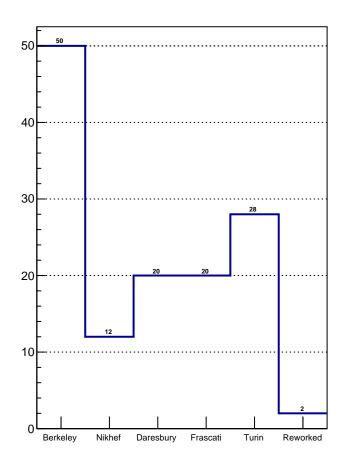
Staves qualified in the previous week

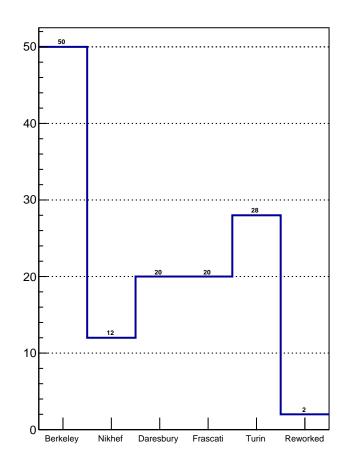
B-ML-Stave-057: (U,L)=(0, 0) bad chips B-ML-Stave-055: (U,L)=(0, 0) bad chips B-ML-Stave-054: (U,L)=(0, 0) bad chips

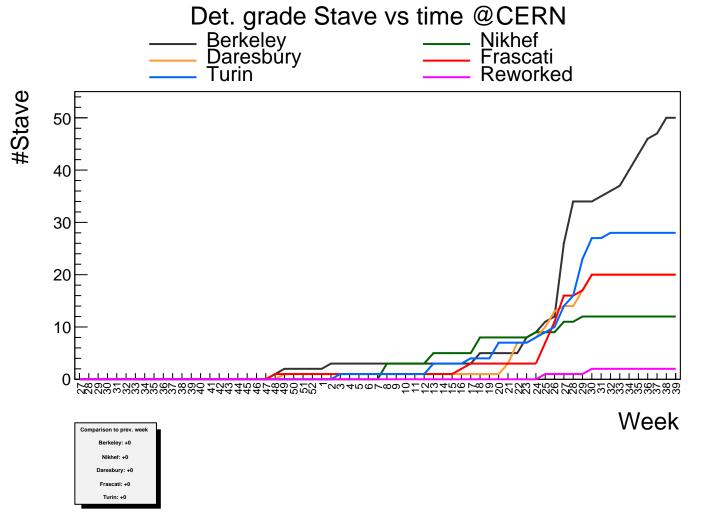
Staves qualified this week



Det. Grade Stave @CERN







# Det. grade Stave vs time @CERN ML(all) ML(DG) OL(DG) OL(all) #Stave 80 70 60 50 40 30 20 10

Qualification rate (December 2018 - prev. week)\*\*

Berkeley: 1.23(all) -- 1.23(DG)

Nikhef: 0.30(all) -- 0.30(DG)

Daresbury: 0.50(all) -- 0.50(DG)

Frascati: 0.47(all) -- 0.47(DG) Turin: 0.70(all) -- 0.70(DG)

OL: 1.97(all) -- 1.97(DG) ML: 1.23(all) -- 1.23(DG)

\*\*Christmas holiday excluded (2 weeks)

HS without a Stave

HSs (DG) not yet tested as Stave
A-OL-HS-U-009: 2 bad chips
F-OL-HS-U-027: 0 bad chips
F-OL-HS-U-026: 0 bad chips
F-OL-HS-U-025: 0 bad chips
F-OL-HS-U-024: 0 bad chips
F-OL-HS-L-027: 0 bad chips
F-OL-HS-L-026: 0 bad chips
F-OL-HS-L-025: 0 bad chips
F-OL-HS-L-024: 0 bad chips
A-OL-HS-U-023: 0 bad chips
A-OL-HS-U-022: 0 bad chips
A-OL-HS-U-021: 0 bad chips
A-OL-HS-L-122: 0 bad chips
A-OL-HS-L-024: 0 bad chips
A-OL-HS-L-023: 0 bad chips
B-ML-HS-U-067: 0 bad chips
B-ML-HS-U-066: 0 bad chips
B-ML-HS-L-067: 0 bad chips
B-ML-HS-L-066: 0 bad chips
B-ML-HS-L-058: 0 bad chips

HSs (non-DG) not yet tested as Stave

**A-OL-HS-L-004: 14 bad chips ->** rework(?)

**B-ML-HS-U-031: 7 bad chips ->** rework(?)

F-OL-HS-U-002: 8 bad chips -> rework(?)

## Stave not DG

### Staves not DG - reworkable

A-OL-Stave-001: (U,L) = (2, 14) bad chips A-OL-Stave-002: (U,L) = (7, 49) bad chips T-OL-Stave-003: (U,L) = (6, 2) bad chips

D-OL-Stave-001: (U,L) = (7, 13) bad chips

Staves not DG - not reworkable

B-ML-Stave-039: (U,L) = (0, 2) bad chips B-ML-Stave-001: (U,L) = (2, 0) bad chips