

| LHC                                  |   |                          |                                    |
|--------------------------------------|---|--------------------------|------------------------------------|
| <b>Machine Coordinator last week</b> | Jorg Wenninger  |                          |                                    |
| <b>Machine Coordinator this week</b> |   |                          |                                    |
| Statistics                           |   |                          |                                    |
| <b>Availability</b>                  | -%  | <b>Stable Beam Ratio</b> | -%                                 |
| Facility Status                      |   |                          |                                    |
| <b>Summary</b>                       | <p>During standard checkout tests a hardware problem appeared on the new B1H crystal collimator TCPCH.A4L7.B1: connection lost between crystal and mechanical stage. The tank was vented and removed from the tunnel on Wednesday, replacement chambers were put in place. Inspection in the laboratory revealed a problem with the linear motion stage. Friday morning it was decided not to re-install the tank immediately but to wait for TS1 despite the higher radiation levels in LSS7. Vacuum bake-out and pump down started on Friday.</p> <p>The powering tests - close to 11'000 - were completed on Thursday. Only one dipole training quench was recorded on RB.23 which quenched 13A below the target.</p> <p>On Friday afternoon, pilot bunches were sent to the TI2 and TI8 downstream TEDs. The lines were steered and the synchronization between the beam and the injection kicker pulses was checked to be correct.</p> <p>Over the weekend the nominal 2023 and the vdm cycle were played with most HW systems (PCs, RF, ADT, BIS, LBDS). The LBDS, injection and FMCM MP tests were completed. Outstanding issue for beam operation: the orbit and tune feedback crashes frequently, BI expert trying to address the issue.</p> |                          |                                    |
| <b>Issues</b>                        | B1H crystal collimator TCPCH.A4L7.B1 removed and replacement chambers put in place – Reinstallation of crystal collimator during TS1.   |                          |                                    |
| <b>Plans</b>                         | <ul style="list-style-type: none"> <li>• Completion of vacuum pump down Monday/Tuesday.</li> <li>• Last checkout tests on Tuesday (if required).</li> <li>• First beam in the LHC on Tuesday or Wednesday morning.</li> </ul>   |                          |                                    |
| Intervention Request                 |   |                          |                                    |
| <b>Yes</b>                           | <b>Duration</b>   | -                        | <b>Preferred date/time</b> various |