

Summary of CERN Broadcast for LHC First Beam Day

On 10 September scientists at CERN in Geneva, Switzerland will attempt for the first time to circulate a beam in the Large Hadron Collider. The LHC is the world's most powerful particle accelerator, and will produce beams seven times more energetic, and around 30 times more intense than any previous machine when it reaches design performance.

Nine hours of live satellite broadcast and webcast will be available from CERN on 10 September. Coverage will be centered at the CERN Control Centre, the main hub of activity as scientists attempt to circulate the first beam. All the controls for the LHC and its pre-accelerators, their services and technical infrastructure are housed in the CCC, and from there accelerator operators inject the beams and steer them around the 27-kilometer ring. Viewers will see activity in the CCC and hear interviews with LHC scientists and engineers, past and present notable CERN personalities, and Nobel laureates in physics.

The first attempt to circulate an LHC beam will begin just after 9:00. Briefings from the CCC will take place hourly starting at 10:00, followed by coverage of Q&A sessions with journalists at CERN for the event. In addition to following events in the CERN Control Centre throughout the day, viewers will also visit the control rooms for the four main LHC experiments, see scientists in the U.S. following the events in their pajamas, and view pre-recorded clips, animations and interviews.

As this is a live event, all times are subject to change. If a briefing is delayed due to activity in the CERN Control Centre, mention will be made in the audio commentary and/or a message will be posted on-screen at the scheduled briefing time. If the startup is delayed, a program of visits and interviews with scientists will be arranged for visiting media.

The list below covers notable events during the day. At other times coverage will alternate between live events in the CCC and pre-recorded material. All times are CEST (Central European Summer Time), UTC/GMT + 2 hours.

- 9:00 Live satellite broadcast and webcast begin with an introduction from the commentators in the CERN Control Centre, an animation showing the passage of a beam through the LHC, and highlights of the LHC operators' daily meeting where they lay out the procedure for getting the first beam circulating in the LHC.
- 9:15 Briefing in French by LHC Project Leader Lyn Evans and CERN Director General Robert Aymar on the plans for the LHC First Beam Day.

Following the statement coverage begins of the first attempt to circulate a beam in the LHC. Lyn Evans will narrate the proceedings in English from the CERN Control Centre. Video of accelerator operators at work in the CCC will alternate with views of the LHC apparatus in its tunnel 100 meters underground.

- 10:00 Briefing in English by Lyn Evans, LHC Project Leader. The three-minute briefing will be followed by coverage of 10 minutes of Q&A between Lyn Evans and journalists at CERN for the event.
- 10:13 Tour of the control rooms of the four major LHC experiments: LHCb, CMS, ALICE and ATLAS. Viewers will see activity in each control room, and hear scientists from each experiment speak about their experiment and experiences during the first beam day. (duration 12:00)
- 10:25 Back to the CERN Control Centre for continuing coverage of the first beams in the Large Hadron Collider.
- 11:00 Three-minute briefing from the CERN Control Centre, followed by 10 minutes of Q&A with journalists at CERN for the event.
- 11:30 Visit by videoconference to Fermi National Accelerator Laboratory, near Chicago, Illinois, USA. Fermilab, which contributes to construction and operation of the LHC and CMS experiment, will host a pajama party in the middle of the night for scientists, media, VIPs and members of the public to follow the events at CERN live as they happen.
- 11:45 Video clips from worldwide non-CERN-Member-State particle physics institutes that contributed to LHC construction. (Pre-recorded)
- 11:56 Highlights from the morning's activities in the CERN Control Centre. (duration 4:00)
- 12:00 Press Conference in English and French with CERN Director General Robert Aymar and LHC Project Leader Lyn Evans. Statements by Director General Aymar and LHC Project Leader Evans will be followed by 20 minutes of Q&A with journalists at CERN for the event.
- 12:25 Visit the LHCb experiment, possibly the first experiment to see evidence of beam in the LHC on 10 September. A five-minute pre-recorded clip explaining the LHCb experiment will be followed by ten minutes of coverage of activity in the LHCb control room and interviews with LHCb scientists.
- 12:45 Movie: The Time Machine: The LHC Adventure is a Journey Through Time. (Pre-recorded, duration 11:00)
- 13:00 Three-minute briefing from the CERN Control Centre, followed by 10 minutes of Q&A with journalists at CERN for the event.
- 13:13 Visit the CMS experiment. A five-minute pre-recorded clip explaining the CMS experiment will be followed by ten minutes of coverage of activity in the CMS control room and interviews with CMS scientists.

- 14:00 Three-minute briefing from the CERN Control Centre, followed by 10 minutes of Q&A with journalists at CERN for the event.
- 14:24 Visit the ALICE experiment. A five-minute pre-recorded clip explaining the ALICE experiment will be followed by ten minutes of coverage of activity in the ALICE control room and interviews with ALICE scientists.
- 14:45 Highlights from the day's activities in the CERN Control Centre. (duration 3:00)
- 15:00 Three-minute briefing from the CERN Control Centre, followed by 10 minutes of Q&A with journalists at CERN for the event.
- 15:13 Briefing in the Globe by CERN Director General Robert Aymar, LHC Project Leader Lyn Evans, and others.
- 15:20 Visit the ATLAS experiment. A five-minute pre-recorded clip explaining the ATLAS experiment will be followed by ten minutes of coverage of activity in the ATLAS control room and interviews with ATLAS scientists.
- 15:50 Highlight footage of the day's activities at CERN. (duration 10:00)
- 16:00 Three-minute briefing from the CERN Control Centre, followed by 10 minutes of Q&A with journalists at CERN for the event.
- 16:24 Tour of the control rooms of the four major LHC experiments: LHCb, CMS, ALICE and ATLAS. Viewers will see activity in each control room, and hear scientists from each experiment speak about their experiment and experiences during the first beam day.
- 17:30 Briefing in English with Lyn Evans, LHC Project Leader. The five-minute briefing will be followed by 10 minutes of Q&A with journalists at CERN for the event.
- 17:45 Highlight footage of the day's activities at CERN. (duration 15:00)
- 18:00 End of satellite broadcast and webcast.