

LHCb top concerns

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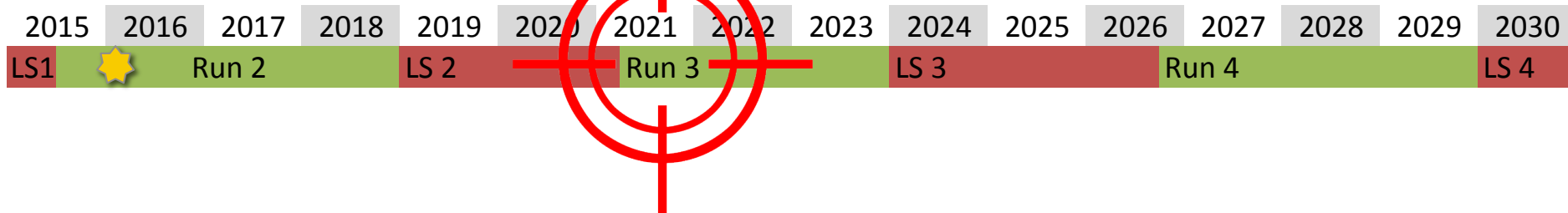
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LHCb Upgrade Timeline

LHC roadmap*



- The big upgrade of LHCb will happen with Run 3
- For the computing currently investigating different scenarios
 - Major architectural and technical decisions to be taken ~ 2017
 - No further changes foreseen in this big scale between Run 3 and 4
- In the process of preparing a “Technical Design Report” for the computing project, due by Q4/17
- LHCb provides its input for today's discussion in this context

* <http://cern.ch/go/H76H>

Top concerns

- Software
 - Increased signal yield (online calibration & alignment), increased trigger rate, software only trigger as of Run 3
 - By far not enough hardware resources to do all the necessary work – especially for simulation
- Distributed Computing
 - With only signal events further offline selection and streaming not effective due to high retention
 - Change the data processing workflow → indexing and selection of individual events instead of files
- Data Preservation
 - Several incompatible changes for Run3 (detector description, conditions) possible
 - Clear slate between Run1/2 and later → need to preserve analysis