



The answer lies in an asymmetry between matter and its counterpart – antimatter. If the universe was perfectly symmetric, both kinds of matter would cancel out. However, we are here, hence there must be a

difference. This difference is called as CP violation-a mismatch between how particles and antiparticles behave

Feynman diagrams describing what happens when particles collide. We'll interpret these results as music.

- This asymmetry in a very specific set of particle decays, where a heavier *Lambda b baryon*– decays into 4 other particles. The particle decays are produced by accelerating protons to almost the speed of light in the LHC and are detected by the LHCb detector, which is designed with the CP violation analyses as one of its main purposes.

Some points(approaches) to keep in mind-

- The sequence of all pitches is pre-decided and strictly followed throughout the piece. I use numerical data (results from paper) as a starting point and use various shifts to generate pitch rows.
- The type of material: in the free section the music is written in a way where synchronous actions can be performed by ensuring eye contact between player pairs (an interpretation of interaction).
- The role of the scientist as both an observer and interferer: the piece begins unconducted, with the conductor only indicating the start of bars. It then moves on to strict, timed and conducted material – there is both a visual (conducting begins) and audio change (different kind of music, more movement).
- Two asymmetrical movements: long and short, signifying the miniscule process itself and its implications (the titles of the movements are Zoom In and Zoom out) in reverse (small size – large movement and vice versa).