## CATCH ME IF YOU CAN

Catch as many as possible interesting collisions before the accelerator runs out of protons.

Out of 40 million collisions per second only very few contain interesting new physics.

We have to filter them out on-line.

40 million

proton bunches per second collide in the CMS detector.

A Higgs boson is produced only every few hours. Potential new physics is even more rare.

