

## LHCb research in Uppsala

*Wednesday, November 25, 2020 10:50 AM (15 minutes)*

As a newly appointed professor in the nuclear physics division in Uppsala I would like present some recent results from my research in LHCb. I will give a brief introduction to LHCb and my main involvements the construction of the detector. Then I'll give a brief summary of two research topics that I have been involved in recently. The first topic is the discovery of the first doubly-charmed baryon and the measurements of its properties, and outline briefly the new area of research that this opens up. The second is the classic LHCb topic of time-dependent CP violation, where the first observation of time dependent CP asymmetries in Bs decays were presented at the Beauty conference in September 2020. In addition to being a milestone in the study of CP violation, the observation was made in decays dominated by higher-order diagrams and hence they provide sensitivity to BSM physics.

### Abstract Track

LHC

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