



**E I N L A D U N G**  
im Rahmen des Teilchenphysikseminars  
zum Vortrag  
von  
**Ben Allanach**  
(CERN, Schweiz, DAMTP, University of Cambridge)  
über  
**„Floccinaucinihilipilification“**

**Abstract:**

By throwing away theories beyond the Standard Model that are not of interest, we may arrive at some that are. We use anomaly cancellation to constrain extensions by an additional  $U(1)$  gauge group factor. Once such an additional gauge factor is spontaneously broken, the resulting  $Z'$  gauge boson has potential phenomenological uses, for example to ameliorate tensions between measurements of certain flavour-changing  $B$  decays and their Standard Model predictions.

We compare and contrast one such  $Z'$  against a simple bottom-up leptoquark model, to look for statistical preference or lack thereof.

**Zeit:** Dienstag, 23.05.2023, 16:15 h

**Ort:** Erwin-Schrödinger-Hörsaal, Boltzmanngasse 5, 5. Stock

Join Zoom Meeting - Meeting ID: 933 4269 3866 Passcode: 185096  
<https://univiena.zoom.us/j/93342693866?pwd=aUpTR0VJNUhJY2Q0ajdaKzI1YWVBQT09>

gez.: A. Hoang, T. Corbett