



Contribution ID: 82

Type: **Lightning Talk + Poster**

A new framework for electric charge breaking

Monday 22 April 2024 15:00 (3 minutes)

I break the $U(1)_{\text{EM}}$ of the standard model by introducing new general scalar fields that obtain vacuum expectation values in their non-neutral components.

This is realised with either **minicharged particles** or with scalars that allow for **new renormalisable interactions**, which I will illustrate at the example of fermion-fermion-photon interactions.

Finally, I show how non-trivial behaviour can lead to strong limits by considering **electron decay**.

Author: SALEWSKI, Manuel

Presenter: SALEWSKI, Manuel

Session Classification: Afternoon Session