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## **Searching for millicharged particles with the FORMOSA experiment at the CERN LHC**

In this contribution, we evaluate the sensitivity for particles with charges much smaller than the electron charge with a dedicated scintillator-based detector in the far forward region at the CERN LHC, FORMOSA. This contribution will outline the scientific case for this detector, its design and potential locations, and the sensitivity that can be achieved. The ongoing efforts to prove the feasibility of the detector with the FORMOSA demonstrator will be discussed. Finally, possible upgrades to the detector through the use of high-performance scintillator will be discussed.

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