

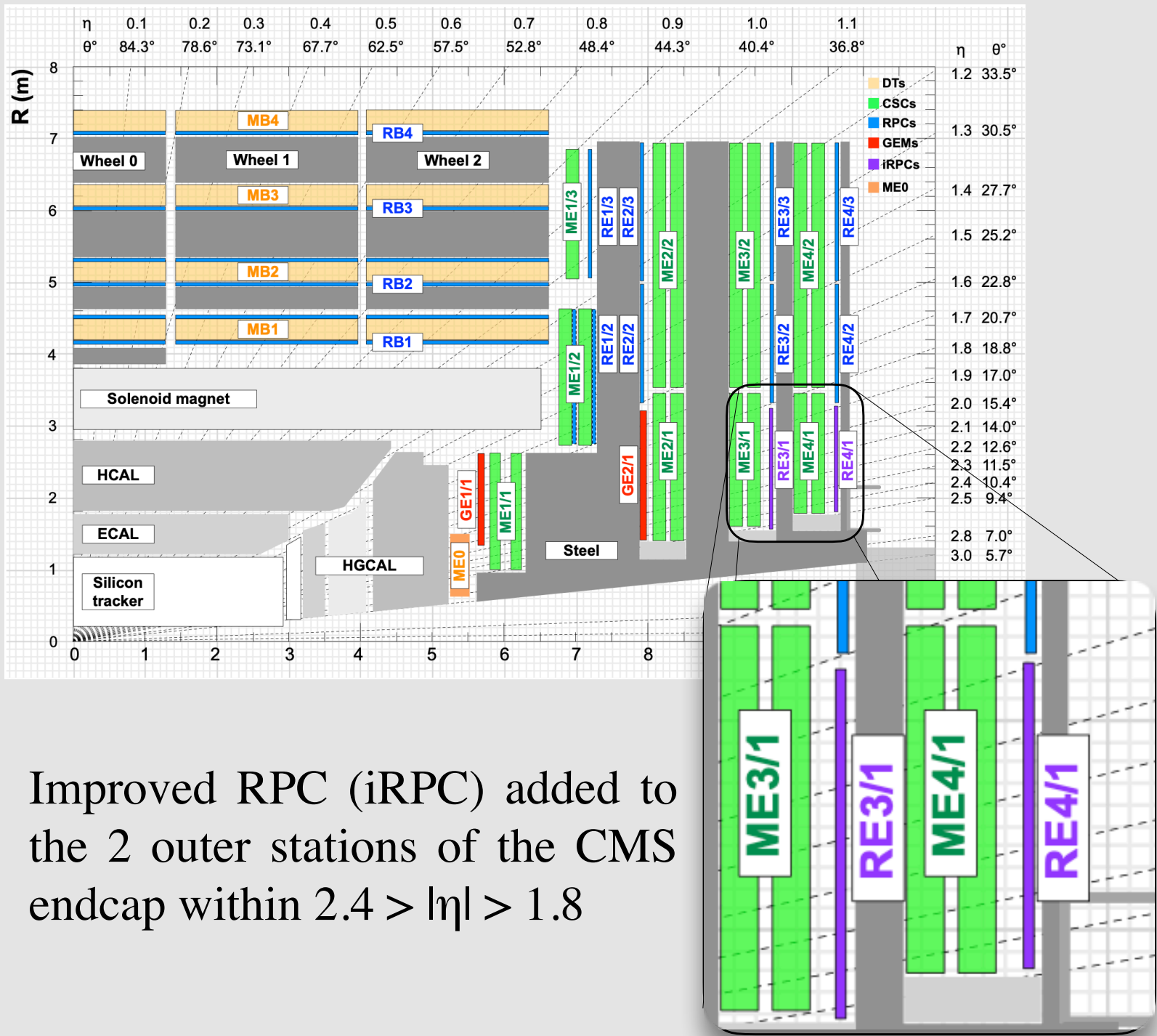
# Performance of the improved RPC demonstrators for the CMS Phase II upgrade

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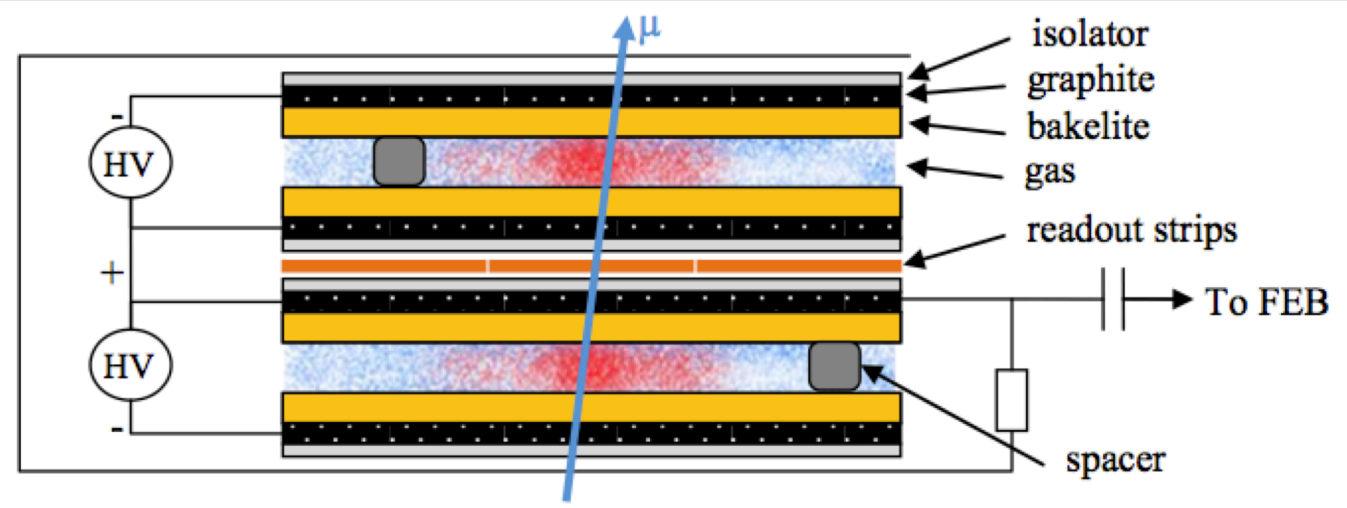


## Motivation

In order to cope with the high particle rate and high pileup environment of the HL-LHC, the CMS collaboration proposed<sup>[1]</sup> installation of new RPCs.



## The iRPC Chamber



## The Front End Board

To cope with the lower charge signal of the iRPC at the same time to keep the iRPC efficiency high, the new front-end electronics (FEB 2.2) are designed. The new FEB is sensitive, has low-noise and high time resolution.

