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## **Study of HE-LHC ventilation strategy in case of fire**

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The current CDR sets a ventilation strategy developed together with EN/CV. CFD simulations of the inflow and outflow requirements of such a new system are necessary to properly size it and ensure performance with all different credible and degraded scenarios (e.g. fire). Additionally, a detailed study on the mechanical smoke dampers and required fire resistance of the ducts will help on optimizing the cost/efficient solution. This talks will present and in-depth CFD analysis of full LHC sector considering different fire scenarios and degraded modes. The simulations will also be used to establish the system requirements in terms of fire resistance.

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