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RPC Detector Simulation Based on CST

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An early test shows serious "crosstalk"in the strips of the RPC detector for ATLAS Phase II. The unexpected signals on non-main strips increase the invalid counts and system load. To find the orgin of the "crosstalk", we decide to simulate the RPC detector and change relate parameters to eliminate the "crosstalk".
CST (Computer Simulation Technology) is a powerful simulation platform for all kinds of electromagnetic field problems and related applications. CST is suitable for our simulation.We tested some models like high surface resistivity of graphene,add isolating bars between strips or segment the graphene.According to the result of simulation,increase the resistivity of graphene or segment the graphene is effective.

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