## XVII Conference on Resistive Plate Chambers and Related Detectors



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## Status and perspectives of the «Standard RPCs»

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The purpose of this talk is to describe the evolution of the standard RPC concept as it was formulated at the very beginning. In spite of its conceptual simplicity, the RPC can be adapted to fulfill very different tasks ranging from muon triggering-tracking at collider experiments, to the detection of Extensive Air Showers for ground based cosmic ray experiments. This talk tries to focus on all free parameters characterizing an RPC and to study how they can be optimized for each application of this detector. The problem of finding environment-friendly gases replacing the present "standard mixture" is quite extensively studied. A look at different possible applications concludes the talk.

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