Abstract for an Invited Paper for the APR10 Meeting of The American Physical Society

Recent Results in Perturbative QCD

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The search for and interpretation of new physics at the LHC and other experiments requires significant theoretical input. Otherwise, uncertainties from Standard Model backgrounds can mask potentially revolutionary advances in our understanding of Nature. In this talk we review recent breakthroughs in techniques for precision QCD calculations that will be crucial in interpreting experimental data during the era of discovery ahead.