## Reduced Order Multirate Schemes in Industrial Circuit Simulation

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This talk contains a detailed discussion of the application of Reduced Order Multirate (ROMR) schemes in an industrial setting. Starting with the mathematical foundations of circuit simulation, Model Order Reduction (MOR) techniques are introduced and briefly dis- cussed. Then the multirate (MR) integration approach for industrial simulation is outlined, and the combination of MR and MOR techniques are presented. Finally numerical experiments verifying the validity of ROMR schemes are shown.

Keywords: Mulitrate, Model Order Reduction, Differential-Algebraic Equations, Circuit Simulation