**Stability of Semi-Extrapolated Finite Difference Schemes**
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ferential equations, finite difference methods are a popular choice. Several factors
come into play when choosing a finite difference method, such as stability, accu-
racy, and computational cost. In response to the small stability regions of explicit
methods and the computational cost of implicit methods, we've developed a novel
discretization technique called semi-extrapolation. Semi-extrapolation generates ex-
plicit schemes from implicit schemes by applying extrapolation in an unconven-
tional fashion. Extrapolation can severely curtail stability, however, we've found
that semi-extrapolation can improve stability, as compared to analogous explicit
methods. In our presentation, we'll introduce our semi-extrapolation technique and
discretize the Advection-Diffusion Equation according to semi-extrapolated methods
and mainstream methods. Then, we'll discuss the stability regions of the schemes
and analyze how the stabilities of the semi-extrapolated schemes compare to the
stabilities of analogous schemes.

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