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Abstract for an Invited Paper
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**Recent Developments in Field-Theoretic Polymer Simulations**

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This presentation will address recent progress in methods and algorithms for conducting simulations of statistical field theory models of polymers and complex fluids beyond the mean-field approximation (as invoked, e.g., in self-consistent field theory). Topics to be discussed include regularization methods, improved stochastic integration algorithms for complex Langevin equations, techniques for locating phase boundaries, and systematic coarse-graining/renormalization techniques for multi-scale simulations. Early results on a promising "coherent state" formulation of polymer field theory will also be presented.