APOPT: MINLP Solver for Differential Algebraic Systems with Benchmark Testing

Differential algebraic systems can lead to large-scale Mixed Integer
Nonlinear Programming (MINLP) problems due to the discretization over a time
horizon. A new solver, BPOPT, exploits a number of structural characteristics
of these systems to solve optimization problems for real-time process control
and scheduling applications.

John D. Hedengren john_hedengren@byu.edu
Jose L. Mojica jlmojica@gmail.com

Department of Chemical Engineering
Brigham Young University
350 Clyde Building
Provo, Utah 84602

Kody M. Powell kody.powell@utexas.edu
Wesley Cole wesleycole@gmail.com
Thomas F. Edgar: tfedgar@austin.utexas.edu

Department of Chemical Engineering
The University of Texas at Austin
1 University Station, C0400
Austin, Texas 78712