1046-65-1904   **Bjorn Engquist*** (`engquist@math.utexas.edu`), Department of Mathematics, University of Texas at Austin, 1 University Station C1200, Austin, TX 78712-0257. *Multiscale modeling of rare events with applications in biology.*

The heterogeneous multi-scale method is a framework for developing and analyzing numerical methods that couple computations from very different scales in space and time. We will present this framework and apply it to processes on cell and molecular scales that either generate rare events or relatively slow dynamics. (Received September 16, 2008)