1035-35-1744   **Jingyu Li**, **Steve Rosencrans** and **Xuefeng Wang*** (xdw@math.tulane.edu), Department of Mathematics, Tulane University, New Orleans, LA 70118, and **Kaijun Zhang**. *Asymptotic Analysis of Dirichlet Problem for Parabolic and Elliptic Equations on a Domain with Coated Boundary.*

The example in mind is protecting an isotropic body from a source in its surrounding, with a thin anisotropic coating. We study the interplay of the diffusion tensor and the thickness of the coating. (Received September 20, 2007)