

Seventh Mississippi State - UAB Conference on Differential Equations - Computational Simulations, November 1–3, 2007, Doubletree Hotel, Birmingham, AL, USA

Coauthors: Linh Nguyen and Toan Nguyen

**PATTERN FORMATION IN CROSS DIFFUSION SYSTEMS**

DUNG LE

The boundedness and Hölder regularity for strongly coupled elliptic systems are investigated. Fixed point theories are used to prove existence of nonconstant positive solution(s) for cross diffusion elliptic systems. Techniques for investigations of coexistence states will be presented.

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF TEXAS AT SAN ANTONIO  
*E-mail address:* `dle@math.utsa.edu`