

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Mapping Phase Boundaries of 3-Component Model Membrane by Monte Carlo Simulation M.R. ALI, J. HUANG, Physics Department, Texas Tech University — Three-component model membrane constituted of two phospholipids and cholesterol is a useful system to study many cell membrane phenomena, such as lipid raft formation and phase separation. Extracting the molecular interactions from the existing experimental membrane data or to extend further to predict new phenomena poses lot of challenges. The problem demands correct computational methodologies along with relevant thermodynamics of model system. In this work, we will present Monte Carlo simulation results of three-component model membranes. The detailed computational methodologies to simulate phase separations in the ternary system will be presented.

M.R. Ali
Physics Department, Texas Tech University

Date submitted: 13 Jan 2006

Electronic form version 1.4