Contribution Title: LAYERING AND WETTING TRANSITIONS FOR AN

SOS INTERFACE WITHOUT EXTERNAL FIELD

Authors: K. S. Alexander, F. Dunlop, S. Miracle-Sole

Presenting author: Alexander K. S.

Affilation: University of Southern California

E-mail: alexandr@usc.edu

Invited speaker:

YRS seminar: NO

We study the solid-on-solid interface model above a horizontal wall in three dimensional space, with an attractive interaction when the interface is in contact with the wall, at low temperatures. There is no bulk external field. The system presents a sequence of layering transitions, before reaching the wetting transition. The number of layering transitions as the wall attraction is varied becomes arbitrarily large (and may become infinite) as the temperature decreases. This contrasts with existing rigorous work which considers layering transitions as an external field is varied.