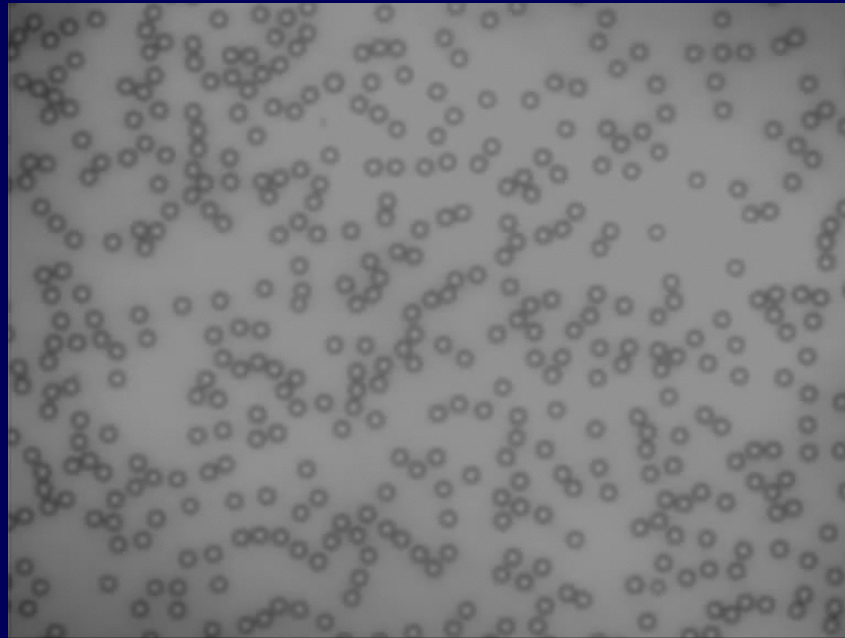
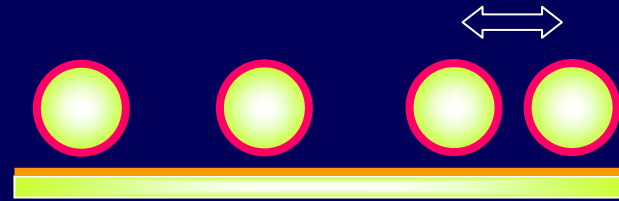


Lateral Critical Casimir Forces

Substrate: hydrophilic
Particles: hydrophobic (lutidine)

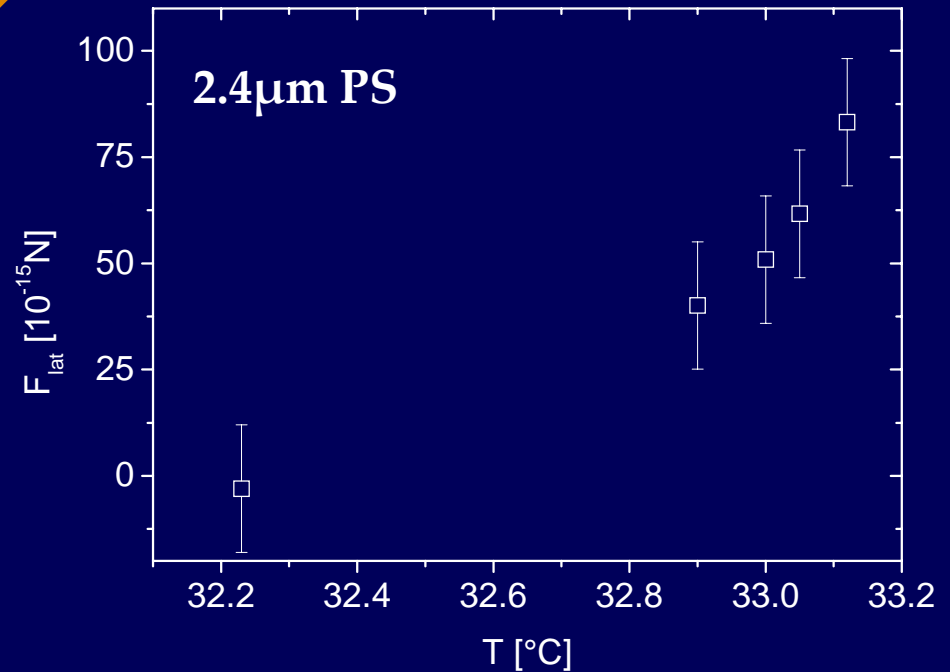
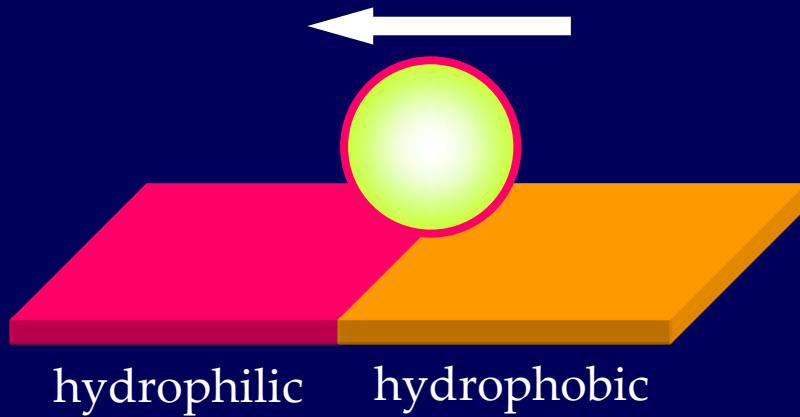


Temperature dependent pair potential

Patterned Substrates

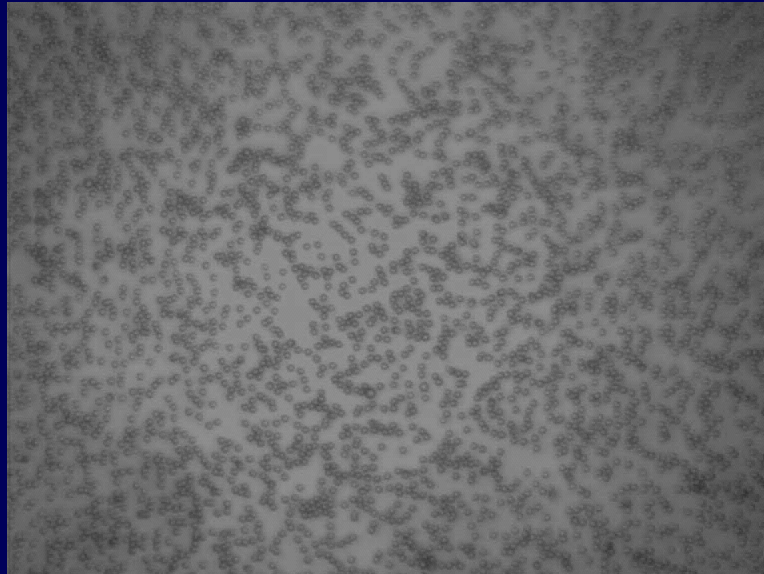
1. Chemical Step

patterning: change of surface properties with focussed ion beam



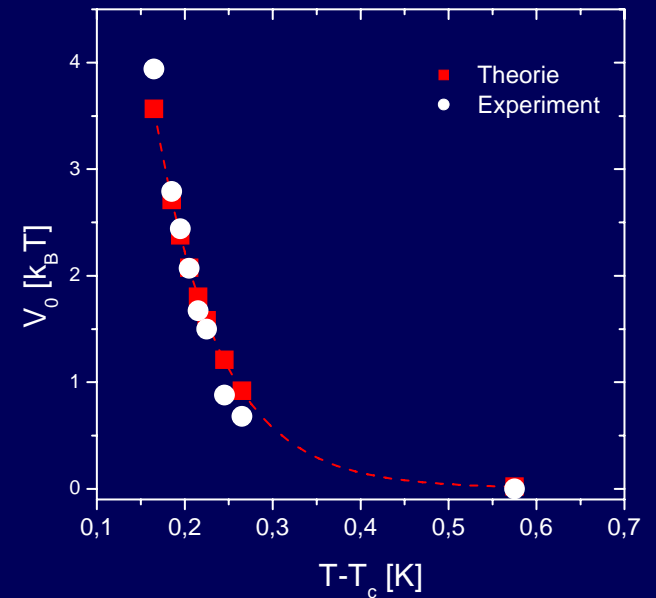
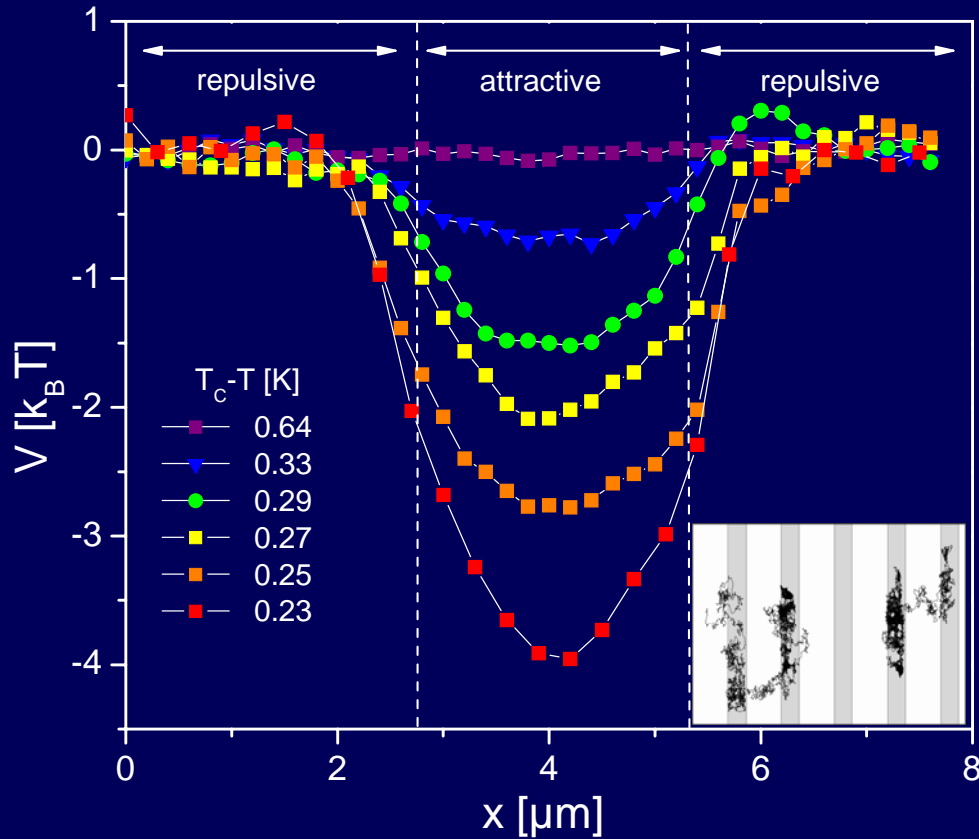
Patterned Substrates

2. Lines



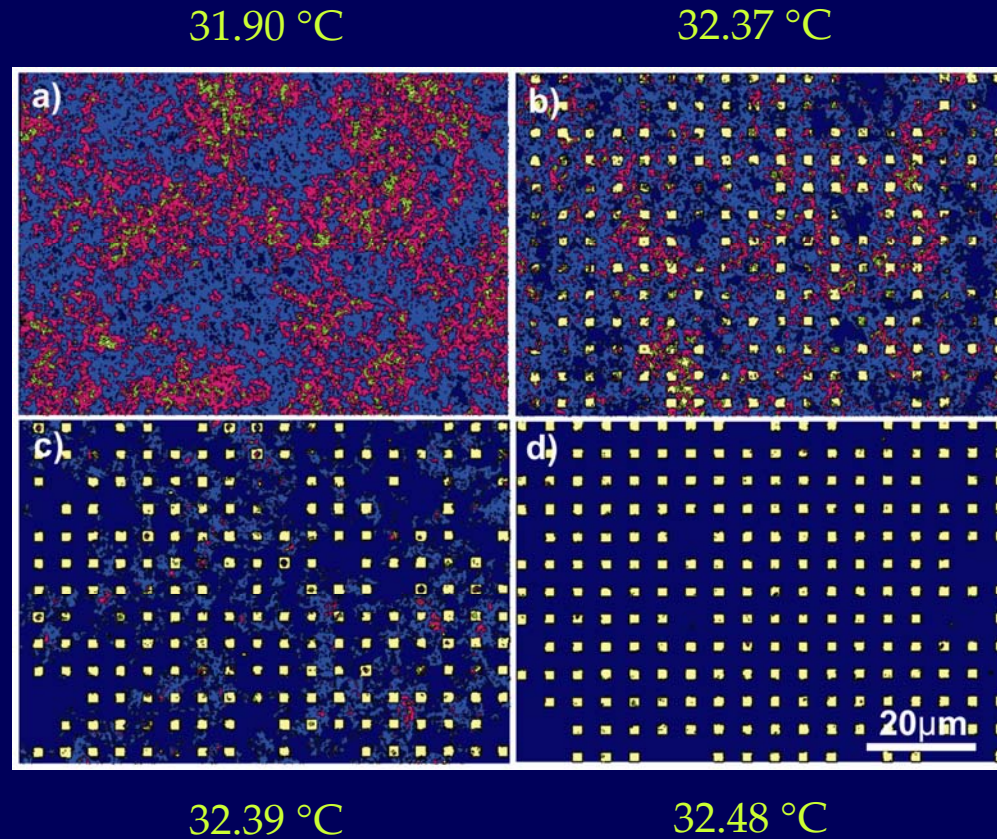
(x 8)

Temperature-dependence

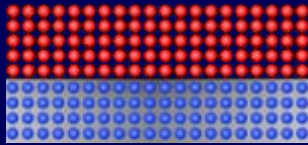


Patterned Substrates

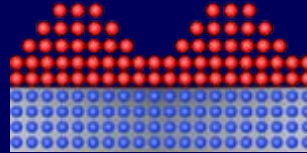
3. Squares



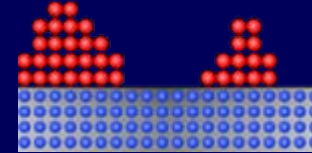
Modes of thin film growth



Frank-van-der-Merwe



Stranski-Krastanov



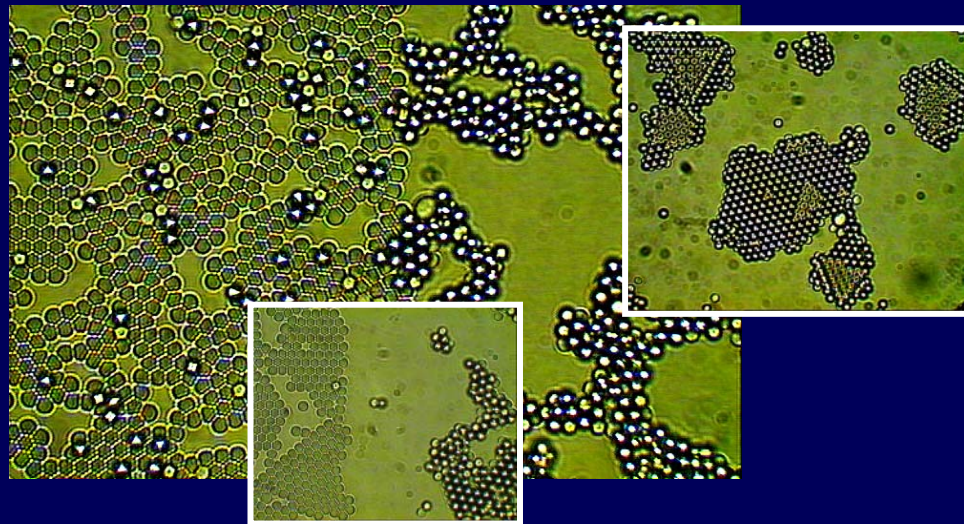
Volmer-Weber

→ increasing adsorbate – adsorbate interaction strength →

particles:
hydrophilic

hydrophilic

hydrophobic



new opportunities for colloids as model systems