ABSTRACT

Objective of this thesis work is to study the dynamics of an active interface. We performed parallel-molecular dynamic simulations for several system sizes and for different Peclet numbers on a minimal model for active systems. We have shown from numerical studies that this active colloidal system phase separates. We determined scaling exponents for the active solid- uid interface (in (1+1) dimensions), formed as a result of confining the active colloid system between two static boundaries. Results obtained indicates that the interface does not belong to the KPZ universality class