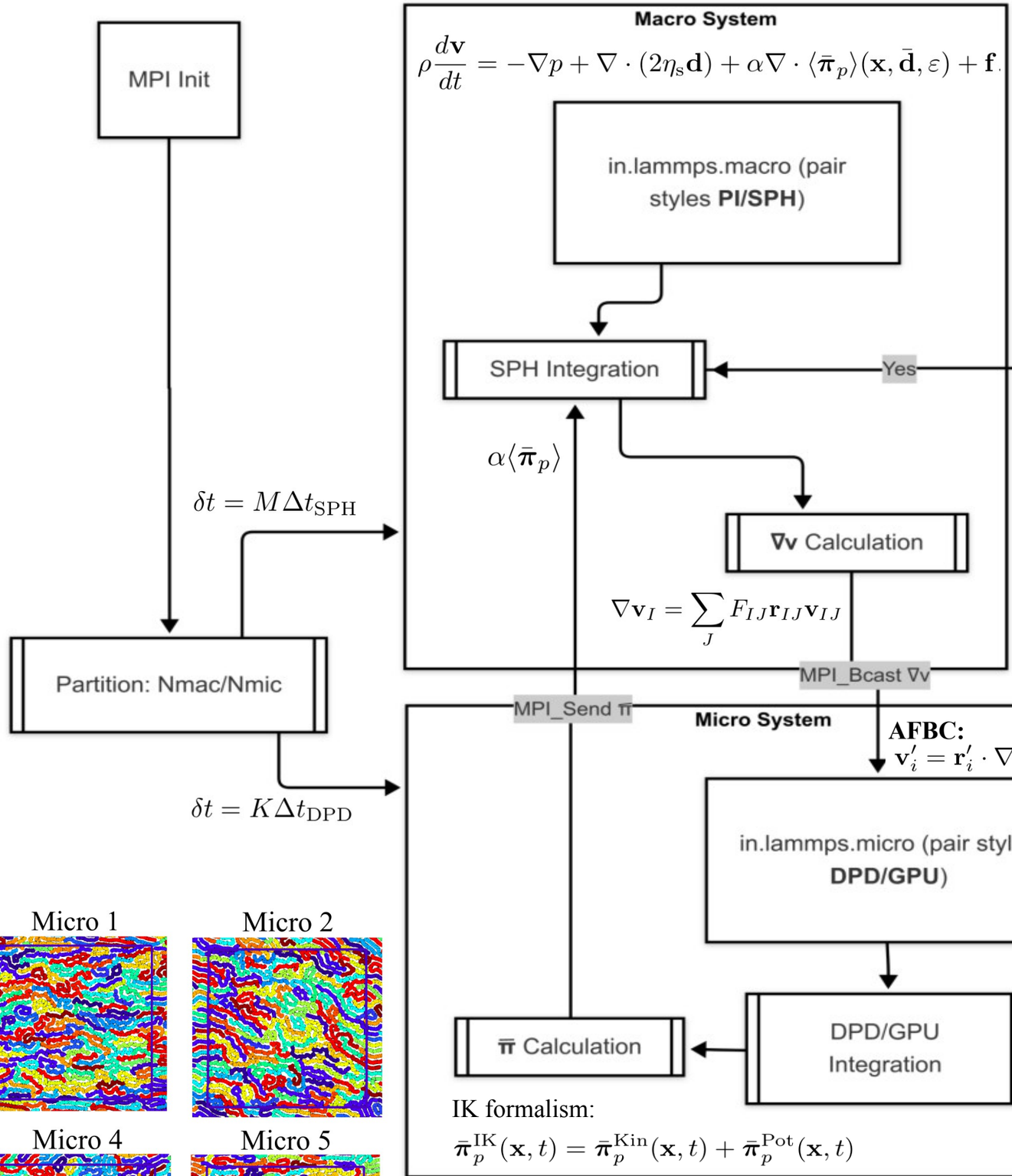
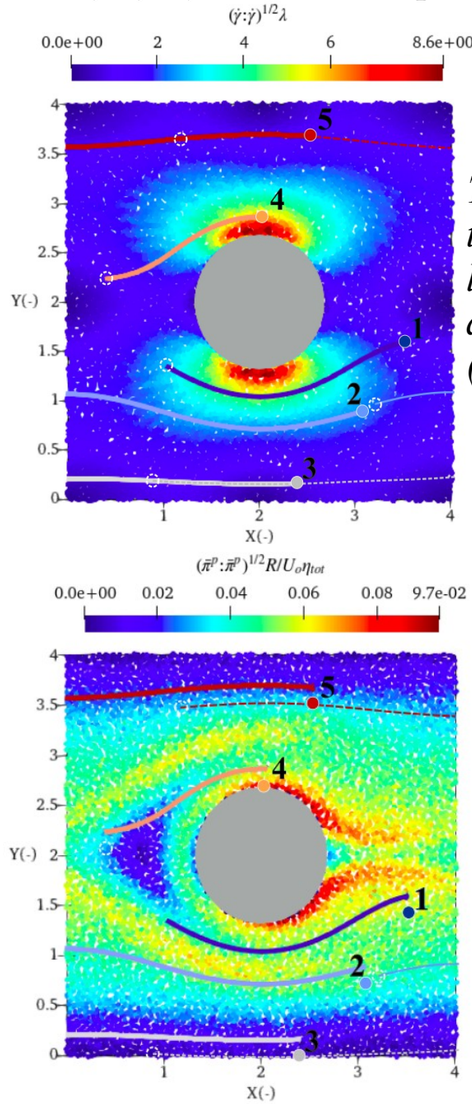


Microdomain (polymer melt N_d=16) distributions at t = λ/4 illustrating the spatial arrangement of polymer chains, colored by each chain's beads, within selected microdomains of the PAC example.

Particle distribution and the streamlines for five representative particles are delineated to illustrate their local trajectories to the Periodic Array of Cylinders example at t=λ/4:



The figure shows the dimensionless local shear rate distribution $(\dot{\boldsymbol{\gamma}}:\dot{\boldsymbol{\gamma}})^{1/2}\lambda$.

The figure shows the dimensionless polymeric stresses, $(\boldsymbol{\pi}_p:\boldsymbol{\pi}_p)^{1/2}R/U_o\eta_{tot}$.

The LHMM – Polymer DPD multiscale coupling workflow. The macro system (top) uses SPH to compute velocity gradients that are sent to the micro system (bottom) via MPI Bcast. The micro system, running GPU-accelerated DPD, returns stress tensors to the SPH solver via MPI Send.