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Continued work on the dissipative particle dynamics simulation of Poiseuille flows in narrow slit-like channels with both flat walls and the walls modified via stripes of polymer brush.

Discussions with P. Bryk, A. Patrykiewicz and S. Sokolowski on:

- existing approaches in simulation of Poiseuille flows,
- thermostatting issues in modelling Poiseuille flow,
- realisation of the concept of “confined fluid-like wall”,
- use of the concept of reverse Poiseuille flow to maintain momentum conservation.

Transfer of knowledge:

- learned on the ways for viscosity coefficient evaluation from velocity profiles,
- the issues solved with essential bond stretching under flow and proper time step choosing for the simulations,
- shared the realisations of various integration algorithms in dissipative particle dynamics method,
- learned technical details for quick parallelisation of the program code for shared memory architectures.