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Flow-Induced Deformation of Cells During Small Opening Traversal IGOR V. PIVKIN, Institute of Computational Science, USI Lugano, Switzerland — We performed experimental and computational study of cells in microfluidic devices measuring cell traversal through the series of openings of various sizes. MCF-10A, MCF-7 and MDA-MB-231 cells were used in experiments and corresponding computational models were developed using particle-based approach. Deformability of cells under the flow conditions will be discussed. This work was done in collaboration with the group of Chwee Teck Lim from National University of Singapore.

> Igor V. Pivkin Institute of Computational Science, USI Lugano, Switzerland

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