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**Evidence of random copolymer adsorption at fluctuating selective interfaces from Monte-Carlo simulation studies** IGOR GAZUZ, JENS-UWE SOMMER, Leibniz-Institut für Polymerforschung e. V. Dresden — We performed Monte Carlo simulations of a binary, strongly separated mixture of A- and B-type homopolymers with some amount of random AB copolymers added. We show that the copolymers tend to localize at the interface between A and B species. We also simulated random copolymers in a one-component surrounding and compared the free energy to the case of copolymers at the interface. The result shows that interface adsorption is energetically clearly favored compared to bulk micellization, contrary to the conclusion made previously in the literature. We calculate the reduction of the interface tension due to copolymers and check the theoretical predictions for the adsorption mechanism and scaling laws made in the previous works, where ideal interfaces were considered.

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