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Semi-flexible polymer with heterogeneous bending rigidity adsorbed at interfaces[1] FRANCISCO SOLIS, Arizona State University, GRAZIANO VERNIZZI, MONICA OLVERA DE LA CRUZ, SUMANTH SWAMINATHAN, Northwestern University — We study a generalization of the worm-like chain model to the case where different parts of the chain have different persistence length. This model is developed to analyze the effect of adsorbed proteins on semi-flexible chains. The relative fraction of heterogeneous component is controlled by adding a chemical potential term to the free energy. We present the analytic solution and several numerical examples in two dimensions.

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