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On Static and Dynamic Properties of Solitons in Molecular Chains IRINA BARIAKHTAR, Boston College — The cross section for scattering of x rays by solitons is calculated for the solitons corresponding to the formation of kinks in quasi-one-dimensional systems, e.g. molecular chains. Obtained is the temperature dependence of the soliton density, the shape of the particle density distribution in the soliton, based on the study of the x-ray scattering cross section by solitons, and other static and dynamic properties of the solitons in quasi-one-dimensional systems.

Irina Bariakhtar Boston College

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