

MICROSCOPIC DESCRIPTION OF DNA DENATURATION

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In the presentation I present a microscopic model describing the process of DNA thermal denaturation which we proposed in [1]. The model is a linear integro-differential non-autonomous equation describing the dynamics of probability density which characterizes the distances between the bases within individual base pairs. I will briefly show analytical results and numerical simulations where one can observe occurrence of DNA bubbles.

REFERENCE

- [1] Mateusz Dębowski, Mirosław Lachowicz, Zuzanna Szymańska, Microscopic description of DNA thermal denaturation, to appear