

Genome mechanics: let's talk about figures

We wish here to emphasize some physical characteristics of genome organization in order to provide a concrete and quantitative framework in which to interpret DNA metabolism events such as transcription or replication. Indeed, as various molecular motors push, pull and twist DNA, transient forces and torques develop within chromatin, with expected regulatory consequences. How much? How fast? How strong? Various biophysical methods are used to provide answers to these questions and improve our understanding of DNA and chromatin behaviour under physiological physical constraints. We will give a brief overview of our current knowledge in the field and emphasize at the same time the importance of DNA supercoiling as a key parameter in genome mechanics.

References

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