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Journal

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Title: Prediction of bendability and curvature in genomic DNA

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Abstract: While most of the DNA sequence data produced by genome projects are analyzed first with methods based on character string similarity, the analysis of quantitative parameters plotted along DNA sequences offer important additional methods for the identification interesting genomic regions in terms of physical or conformational properties. A growing collection of DNA parametric plots is available from the ICGEB sever (<http://icgeb.trieste.it/dna/>), with special respect to the prediction of curvature and bendability. A preliminary analysis of the these parameters in the genomes available so far shows that both of these parameters show grossly similar distributions in the various genomes, and the structural differences found do not correspond to the known phylogenetic classification of the genomes.

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