

Poster: Revealing DNA's topology : A spectral energy approach to loop detection

Loop formation is a crucial aspect of understanding chromatin architecture and its functional role. However, detecting loops remains challenging due to cell population variability and conformation randomness. In this study, we propose a novel approach utilising spectral analysis to identify and quantify loops in experimental conformations obtained through super-resolution imaging. Applying our method to published data by Bintu et al. (2018), we successfully provide a comprehensive and statistically validated description of the global chromosomal architecture, affirming the effectiveness of our approach.

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