

Abstract Submitted
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Novel techniques for study of the nucleosome core particle ionic atmosphere and its role in electrostatically-driven DNA packing KURT ANDRESEN, Colgate University — The nucleosome core particle (NCP) is the primary mechanism for DNA compaction. While the wrapping of the DNA around the histone core is thought to be at least partially sequence-dependent, the packing of the nucleosome cores is believed to be almost entirely electrostatic in nature. Using novel techniques to probe the ionic atmosphere, we hope to elucidate details of this compaction and provide a quantitative description of the positive and negative ions that surround the nucleosome. Results of these experiments will be presented. This work should have implications for nucleosome compaction, chromatin remodeling, and more generally electrostatics of highly charged biomolecules.

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