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Dynamics of Histone Tails within Chromatin[1] MORGAN BERNIER, JUSTIN NORTH, MICHAEL PAGE, The Ohio State University Physics Department, CHRISTOPHER JARONIEC, The Ohio State University Chemistry Department, CHRISTOPHER HAMMEL, MICHAEL POIRIER, The Ohio State University Physics Department, CENTER FOR EMERGENT MATERIALS PROTO-INTERDISCIPLINARY RESEARCH GROUP COLLABORATION — Genetic information in humans is encoded within DNA molecules that is wrapped around histone octamer proteins and compacted into a highly conserved structural polymer, chromatin. The physical and material properties of chromatin appear to influence gene expression by altering the accessibility of proteins to the DNA. The tails of the histones are flexible domains that are thought to play a role in regulating DNA accessibility and compaction; however the molecular mechanisms for these phenomena are not understood. I will present CW-EPR studies on site directed spin labeled nucleosomes that probe the structure and dynamics of these histone tails within nucleosomes.

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[X] Prefer Oral Session
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