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THE DNA: FROM THE ELECTRON TO THE CHROMOSOME

The DNA is a multiresolution system that needs to be studied sometimes at the sub-nanometer and sub-femtosecond level, and others at the micron and second levels. This multi-scale nature generates a formidable problem for theoretical methods that needs to be solved by using multi-physics approaches. I will summarize during my talk recent methodological advances done in Barcelona to obtain a holistic view of DNA, from the electron to the chromosome. I will show how, by using methods with deep roots in the basic formalisms of quantum mechanics we can understand chromatin structure and function.

Monday, July 13, 2015  
3:00 PM  
Laufer Center Lecture Hall 101  
Host: Al Perez

Refreshments following seminar  
Laufer Hub 110