How Partners Fold RNA and DNA

Because both RNA and DNA carry large negative charge, interaction with oppositely charged partners is required for folding and function. Despite the important roles of these partners, little is known about how they structure or interact with nucleic acids. We develop and apply new experimental tools that highlight the role of partners, ranging from ions to proteins, in important biological processes.

I will discuss two recent dynamic structural studies. The first provides a new view of RNA folding, focusing on the critical interplay between the nucleic acid and its ion partners. The second follows DNA as it unwinds from tight storage around a protein core in nucleosome core particles, a basic unit for genome packaging.

Hosted by Professor Chi Mak

The scientific community is invited