

Viral Capsid Dynamics: From Maturation to Assembly

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In this talk I will review a family of multi-scale, multi-resolution models that enable the exploration of the dynamics of viral capsids during maturation, with focus on contrasting and analogous behavior exhibited by viral capsids of differing morphology and complexity. I will then discuss a class of minimalist models that can be used to study the dynamics and equilibria of viral capsid assembly. I will illustrate several general features of viral assembly that may provide connections and rationalizations for observed biological data associated with the formation of large, multi-component virus structures.

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