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GETTYSBURG COLLEGE SEMINAR SERIES  
CROSS-DISCIPLINARY SCIENCE INSTITUTE

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*presents*



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## *“Seeing Proteins Move with X-ray Crystallography”*

The next frontier of structural biology is to understand the role of dynamics in protein function. Fundamental protein properties, from catalysis and allostery to evolvability, are thought to depend on protein motions. Recent breakthroughs in structural biology have made it possible to capture proteins undergoing large structural changes, yet their subtle breathing motions remain one of the least understood facets of protein structure. For many decades, the analysis of diffuse X-ray scattering held the promise of animating X-ray crystal structures with such motions. However, it has been exceedingly difficult to measure and interpret this complex signal. In this talk, I'll describe how problem was cracked and its potential for advancing structural biology.

FRIDAY, MARCH 17, 2023 • NOON  
MARA AUDITORIUM, MASTERS 110

*Lunch will be provided.*

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