

LadHyX Seminar – March 28th, 10:45

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**Four-Scale Mechanics of Muscle Contraction: from Molecules to Organ**

Muscle contraction is generated by molecular motors that are assembled into crystalline arrays of contractile units within the muscle fibers. This hierarchical anatomical structure enables the transmission of force from the nanoscale to the macroscale. In this talk, I will review the results obtained over the past decade on the mechanical modeling of this fascinating machinery across these different scales, highlighting both our current understanding and the questions that remain to be explored.