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Biopolymer networks in cells[1]

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This talk will discuss the role of biopolymer networks in cells. We probe their properties through measurements of fluctuating motions of particles within the cell. These motions have many similarities to thermal motion and, in fact, are often misinterpreted in the context of passive microrheology. Here, we demonstrate that the motion is, instead, driven by the presence of molecular motors within the cell, and we show how this motion can be interpreted quantitatively to determine the nature of the fluctuating forces in the cell due to the molecular motors.

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