The statistics of molecular motor trajectories on different two-dimensional structures S. M. ALI TABEI, FAEZEH JAHANMIRI-NEZHAD, MICHAEL MARTIN, COLTEN LASTINE, University of Northern Iowa — Molecular motors move on a complex cytoskeleton network to transport material within the cell. In this talk, we investigate different scenarios of transport on two-dimensional network structures. We will study different statistical properties of an ensemble of simulated trajectories such as the frequency of directional changes and diffusion statistics. We will investigate how these statistical measures depend on the geometrical properties of the underlying structure.

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