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Visual perturbations and the collective dynamics of fish schools JULIA GIANNINI, JAMES PUCKETT, Gettysburg College — We investigate the dynamics of the collective behaviors exhibited in a laboratory fish school. Using an artificial light gradient with varies both spatially and temporally, we investigate the competition between individual locomotion and local polarization arising from social interactions between individuals. We will discuss how our work informs current agent-based models on the interplay between social interactions and heterogeneous environments.

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