

Abstract Submitted
for the OSS16 Meeting of
The American Physical Society

Light-sensitive reaction-diffusion waves in a checkerboard-like illumination system. SPENCER KIRN, NIKLAS MANZ, College of Wooster — We will report about a set-up to experimentally investigate the propagation behavior of excitation waves traveling through an inhomogeneously illuminated reaction-diffusion medium, including preliminary results. Schebesch and Engel (I. Schebesch and H. Engel, *Wave propagation in heterogeneous excitable media*, Phys. Rev. E, **57**(4), 3905–3910, 1998) calculated numerically the propagation behavior of light-sensitive excitation waves in a pure checkerboard-like illuminated system. We are using the model system of excitable media, the chemical Belousov-Zhabotinsky (BZ) reaction, to verify their one-dimensional and two-dimensional results.

Spencer Kirn
College of Wooster

Date submitted: 18 Mar 2016

Electronic form version 1.4