Abstract Submitted for the DFD17 Meeting of The American Physical Society

Fluid Mixing in the Eye Under Rapid Eye Movement¹ JINGLIN HUANG, MORTEZA GHARIB, California Institute of Technology — Drug injection is an important technique in certain treatments of eye diseases. The efficacy of chemical mixing plays an important role in determining pharmacokinetics of injected drugs. In this study, we build a device to study the chemical mixing behavior in a spherical structure. The mixing process is visualized and analyzed qualitatively. We hope to understand the chemical convection and diffusion behaviors in correlation with controlled rapid mechanical movements. The results will have potential applications in treatment of eye diseases.

¹Resnick Institute at Caltech

Jinglin Huang California Institute of Technology

Date submitted: 31 Jul 2017 Electronic form version 1.4