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Thermal Effects on Fluid Mixing in the Eye^1 JINGLIN HUANG, MORTEZA GHARIB, Caltech — Age-related macular degeneration (AMD) is the leading cause of central vision loss in the developed world. In the case of wet AMD, it can be managed through serial intravitreal injections of anti-vascular endothelial growth factor (anti-VEGF) agents. However, sometimes the treatment is ineffective and causes side effects. One possible cause of the ineffective treatment is the inefficient fluid mixing in the eye. Continued from my talk last year, we are now focusing on the understanding of thermal effects on fluid mixing in the vitreous chamber and various parameters that could affect it. The study outcomes will be useful for inspiring eye doctors to develop better strategies for improving treatment efficiency and optimizing patient experience.

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