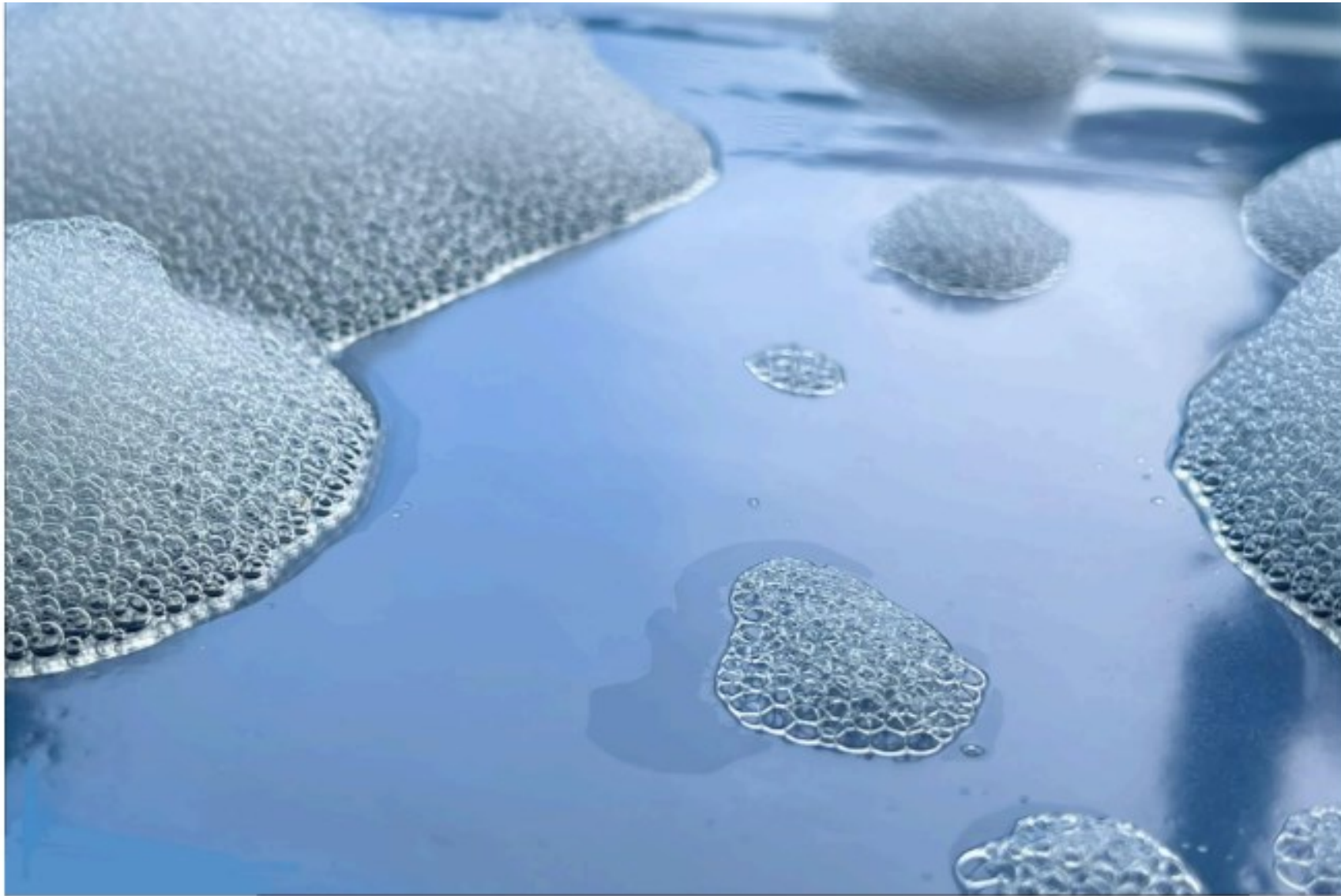


PHYS213 Special Project #1

Shapeshifter

September 2026



By Leah Alimenti

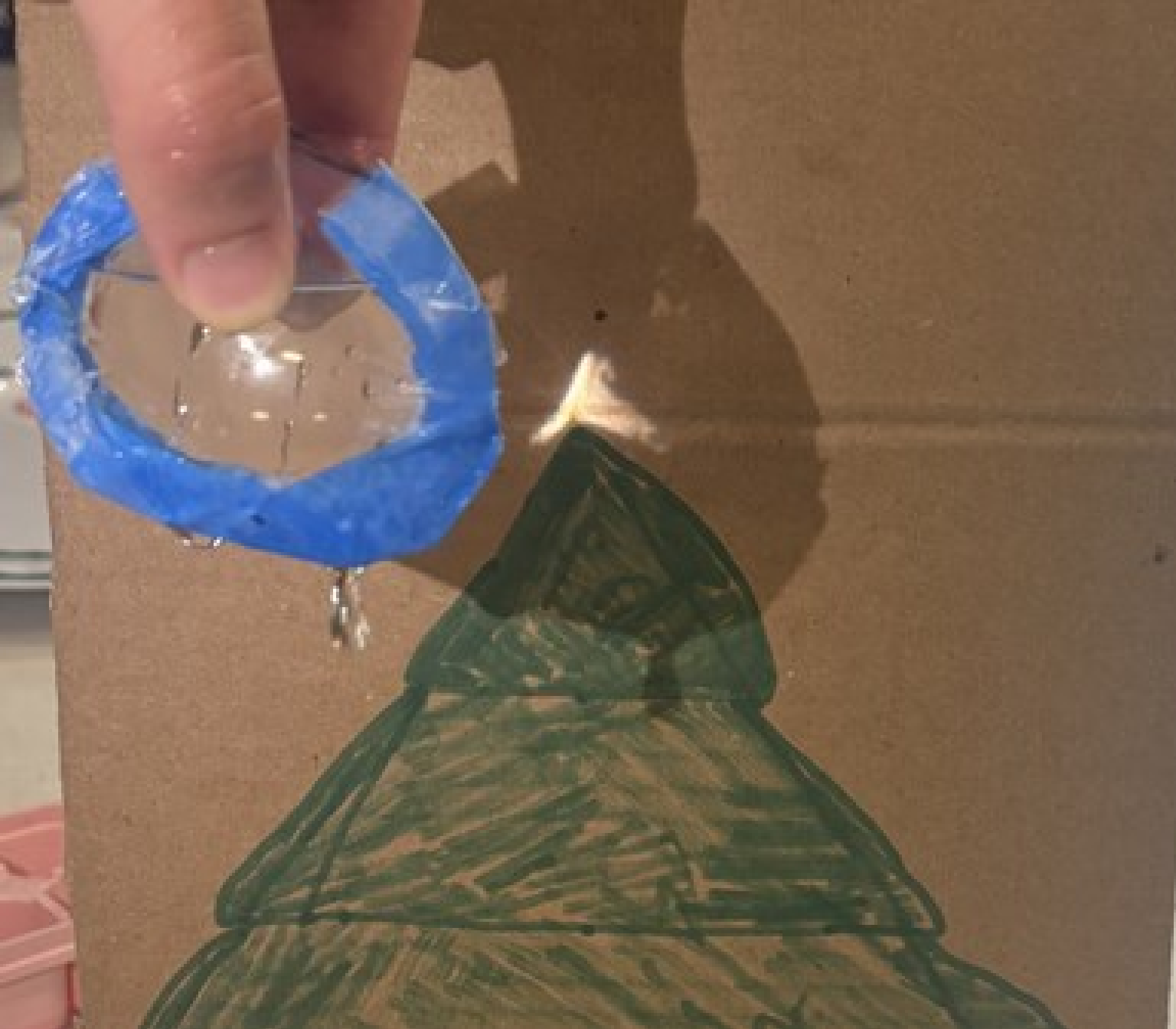
- This image captures a mimicking of the sky through the use of reflective surfaces and small soap bubbles. The vibrant colors reflect inside the bubbles as well, highlighting their outlines and soft shape. Blurry images of the bubble clouds in the background enhance the idea of them being far away, just like real clouds on a warm day would look.



By Kat Blackwood

Title: The piece Winner
Winner Red Panda
Dinner

It represents the desire
to win and the feeling
that it may never be
achievable.



By Will DeFelice

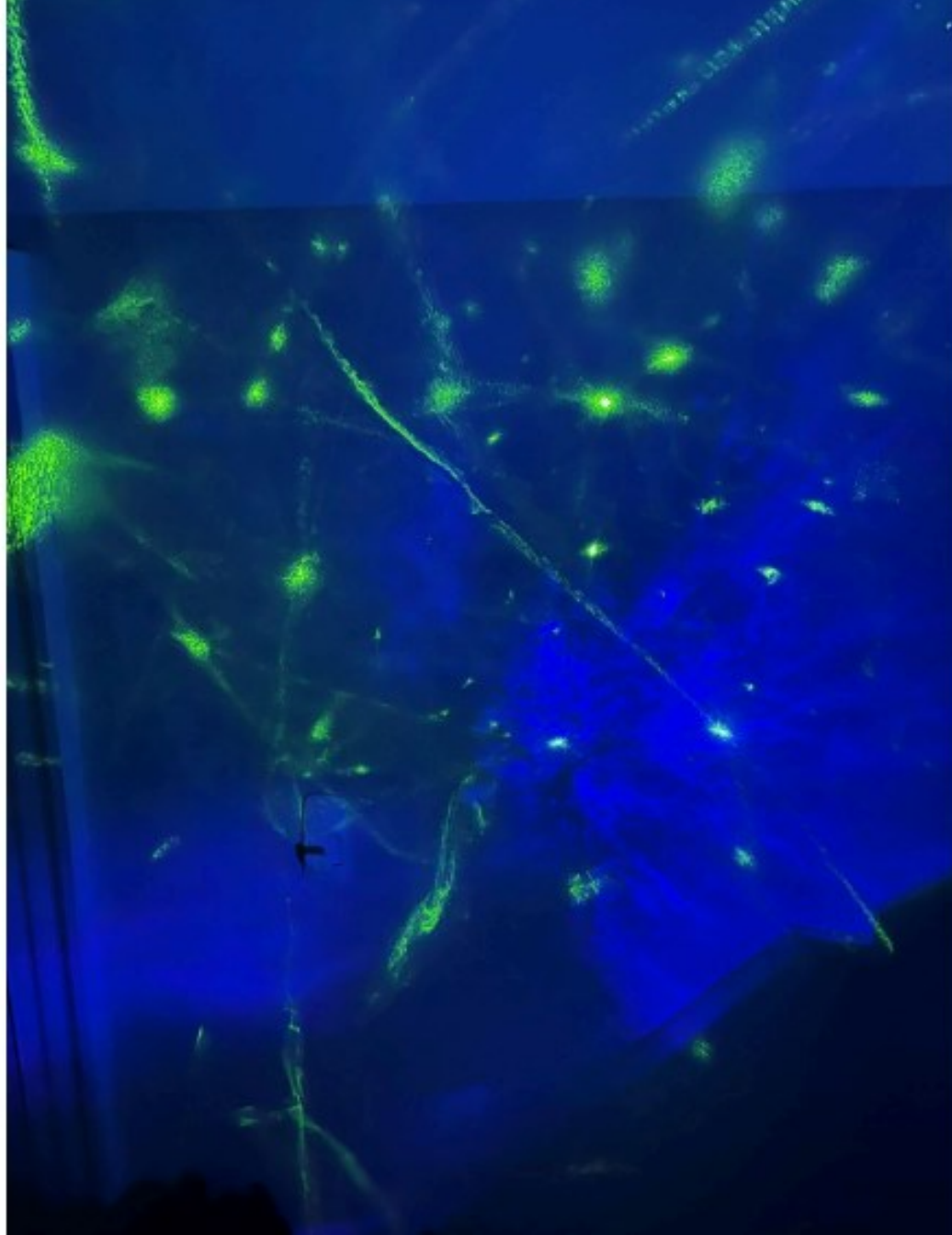
I created a convex lens using pieces of a plastic bottle taped together and filled with water. I then shined my iphone flashlight through the lens to create an image. The art piece was having the image be a star on a Christmas tree I drew (albeit poorly). The beams focused better in other attempts than in the picture, however I chose the photo where the image looked the most like a star.



By Aidan Delpino

Title: Torch Light

This optical art project consists of a flashlight and a fancy glass bottle semi filled with a brown colored liquid. The glass bottle creates a beautiful refraction pattern scene in the photo. The pattern is accentuated by the yellow color produced from shining the light through the liquid.



By Matthias
Eiff-Waters

Title: Dying Light



By Dominick Fattore

Title: Aurora

Basically, my system starts with a flashlight, which is then focused by a lens to create a better image. The light then reflects off of my mirrored sunglasses, which turn the light into a pretty green-purple gradient. This gradient is then transmitted through the water bottle, which spreads out the light and adds artistic aberrations before the final image appears on the wall.



By Patrick Gohl

Art piece title: A Fish Through the Water

My art piece consists of two optical systems. The primary system consists of a desk lamp with an upside-down drawing of a fish taped to it, covered by a box with a hole in the end containing a lens. The light from the lamp passes through the drawing, transmitting the colors of the image. This light is then passed through the lens, which, in theory, should focus the light to create an inverted, shrunk image on the wall. In reality, the lens creates three images of varying levels of distortion. This is because the lens (which is made from two hand-cut circular pieces of curved plastic from a water bottle, which are taped together to be water-tight, and then filled with water through a small gap) has many layers of clear tape around the edges, and as such, the various thicknesses of tape alter the geometry of the lens such that it focuses the light to three different points with three different intensities. The secondary system consists of a reading light underneath a gallon ziploc bag filled with water. The intention behind this is that as the bag wobbles after being placed, the light refracts differently at the peaks and troughs of the waves on the water's surface, projecting a pattern similar to that at the bottom of a pool.



By Rebecca Graber

This attempt uses an empty jam jar with some interesting diamond patterns on the rim as a lens. By holding it in front of the camera lens, I got super interesting distortion with my reflection in the mirror! I think it makes the world look a little abstract with this “tunnel-vision” effect happening around the edges.



By Joss Hempel

“Peak-a-boo Cat”

The setup compares a polarized lens in front of a computer monitor and a phone with a privacy screen. The monitor becomes dark when the lens is rotated perpendicular to the monitor’s linear polarization, because the polarizer blocks that orientation of light. The phone remains visible through the rotating lens because its output is not strongly linearly polarized in the same way, so no lens angle completely blocks it. However, from a side viewing angle the phone becomes dark because the privacy screen restricts the directions in which light can leave the display.



By Aislinh
Kelley

Project Title: Not Everyone
Works The Same



Echo Chamber

*O. Tulchinsky
September 2026*

By Ophelia Tulchinsky

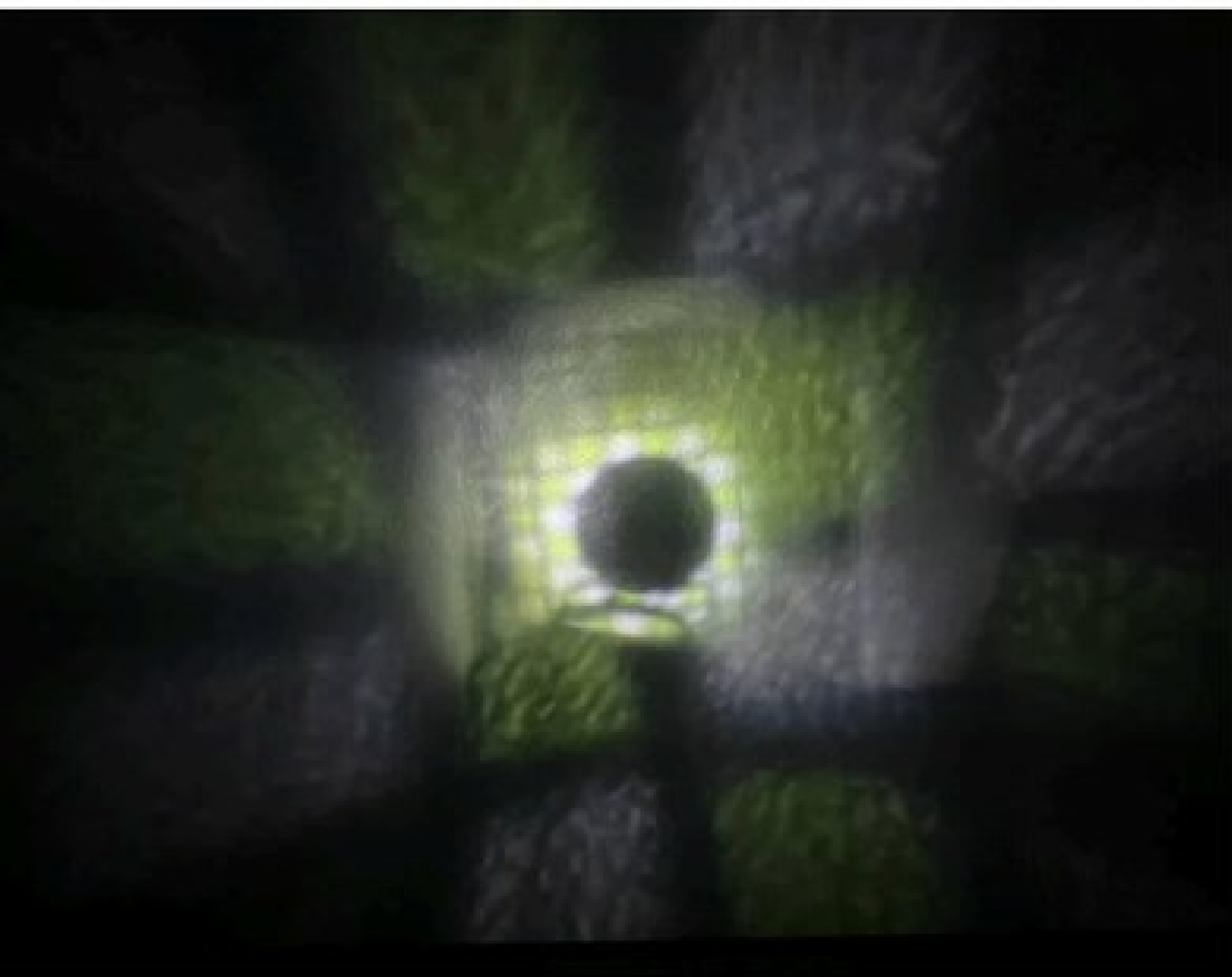
My art piece represents echo chambers' effects on the mind, through using each light to represent a viewpoint (the green light is produced by filtering a phone light through a translucent green water bottle) and the bag of water/lens to represent the mind receiving/bending the perspectives.



By Mason Viola

Title: Memory of Forgotten Team

My mother's Redskins team branded coaster reflected in the aluminum foil mirror through the water glass lens. The effect gives a distorted image of team's brand to illustrate the idea of a memory that is no longer as vivid as time passes on since the team been rebranded several years now. The system uses aluminum foil over a glass bowl to create a convex mirror which distorts and flips the image and water in a glass that acts as a convex lens which further distorts and reorients the image.



By Luka Yuzvenko

“Verdant Double”

Description: When a colorful fragment of a plastic bag meets the humble marble, a most excellent double pattern emerges. Upon the plastic piece was drawn a grid, with every other square colored green. Light is directed through a small hole, after which it strikes the plastic, and then immediately afterwards hits the star of the show—the marble. The small pattern’s image obediently follows the real life plastic, but the large pattern is too quirky for that. Not only does the large pattern go in the opposite direction, but it also balloons out with a spectacular pincushion distortion. One last thing: that grainy design on the wall is neither the wall itself, nor an artifact of the poor image quality. It’s actually the imperfections on the surface of the marble that you typically wouldn’t see so clearly otherwise.