

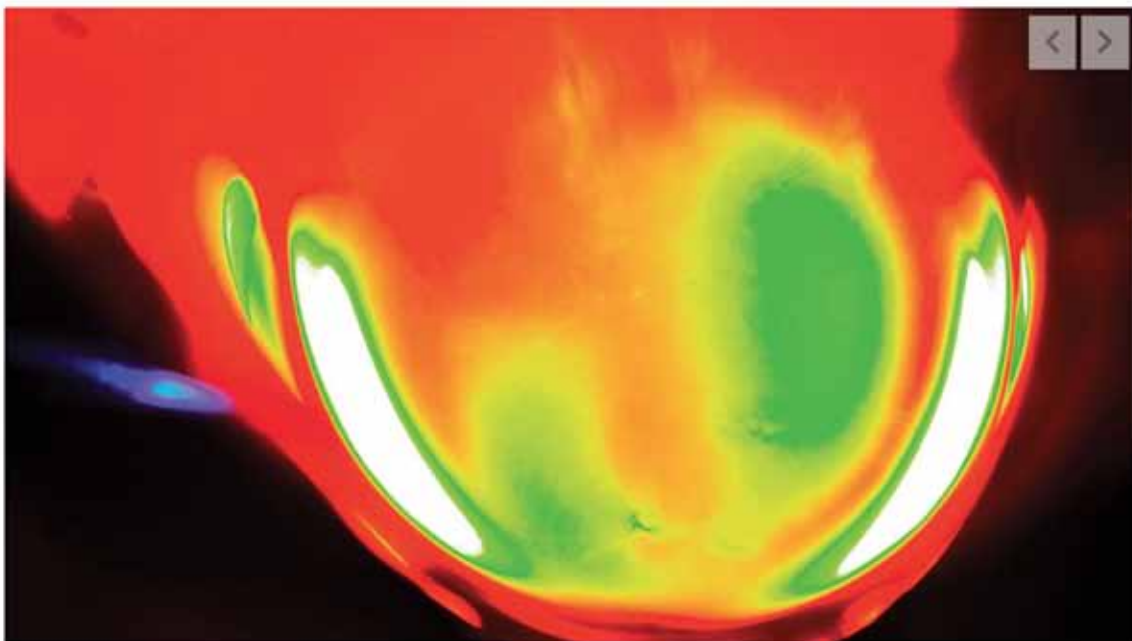
# Pasatiempo

## I must be hallucinating: Stephen Auger's "IRIS"

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Most of us spend our waking hours tending to the tasks the day demands of us, from the time we're out of bed until we've again resigned ourselves to sleep. During the day, we are primarily experiencing beta brainwaves, when our attention is given over to the outside world and engaging actively and consciously with the challenges it presents. We might not think of it this way, but we are in a somewhat heightened state of stress during normal waking hours.



Stephen Auger: *IRIS (Golden Orb)*, 2018, interactive sensorium, photo Alejandro Stepenberg

Stephen Auger would like to introduce you to some other brainwave states via a novel project he calls IRIS. It is a "sensorium" designed to alter your brainwaves enough to trigger your visual system and produce the perceptual phenomenon known as a phosphenes, or the experience of seeing light patterns or shapes in the absence of light. IRIS premieres at Axle Contemporary in conjunction with the InterPlanetary Festival and Currents.

IRIS works on your senses, triggering phosphenes by subjecting you to a combination of pulsing light, sound, and vibrations. "It induces the very vivid and beautiful patterns that are seen within the mind's eye," said Auger, an artist and scientist trained at the Center of Advanced Visual Studies at Massachusetts Institute of Technology. "Each participant will have their own particular experience, although the brainwave entrainment is exactly the same for each person," he said. "The roots of this are really within the depth of human history, going as far back as the early Buddhist monks, who do something called dark retreat meditation that induces exactly the same type of experience." Auger is joined by IRIS programmer Mikey Sklar and Benjamin Smarr, a neurobiologist and behavioral scientist who advised on the project, at 12 p.m. on Friday, June 8, for the InterPlanetary Festival discussion "Future Evolution of the Brain-Body on Earth and Space." In addition, Auger discusses the project on National Public Radio's Morning Edition on Saturday, June 9.

“We’re working with people from Johns Hopkins University, Harvard Medical School, and the University of California - Berkeley,” he said. “All of what we’re doing is deeply informed by these relationships we have with these psychiatrists, psychologists, and neuroscientists.” Auger, who produced IRIS under the medical and psychiatric advisement of George Greer, a former president of the Psychiatric Medical Association of New Mexico, and in conjunction with Smarr, Sklar, and producer and composer Jeff Bova, among other team members and advisors, takes his cue from the longtime interest that people the world over have in attaining heightened states of being by means of sound, particularly drumming. “The shamanic use of drumming and sound is very related to what we’re doing,” he said. “There are certain rhythms, certain tempos, that have, over many thousands of years, come to be known to induce trancelike states, or states of altered consciousness. Why do we do that? Why do humans seek altered states? The simple answer to that is when you induce these states — and they are very related to the series of brainwaves that come into being involuntarily when you are in the presence of certain types of rhythms and rhythmic light — it gives you a break from the grasp of what a psychologist might call the conditioned mind.”

There may be corollaries between the effects produced by IRIS and those of psychedelics such as LSD and psilocybin, but the effects are milder, and, outside of those produced by the brain itself, there are no chemicals involved. IRIS is intended to bring you a totally natural, albeit perceptual experience. The phosphenes, or patterns seen in the mind’s eye, are not dissimilar to what you might perceive when applying slight pressure with the palms of your hands to your closed eyes. In fact, those are exactly what phosphenes are. “There are actually five levels of what are called closed-eye visualizations,” he said. “With IRIS, we’re at, essentially, a level three, which is where it’s purely geometric patterns: lots of pinwheels, spirals, grids of different kinds. These types of responses that human beings have to sound and light and vibration are very immediate.”



Stephen Auger: *IRIS (Nebula and Spear)*, 2018, interactive sensorium, photo Alejandro Stepenberg

In all, the experience lasts about five minutes from start to finish. This short duration is, in part, due to the fact that Axle is a mobile gallery with limited space. Only three people can participate at a time, so Auger and his team need to keep things moving. The phosphene state accounts for about three minutes of the total duration. If there’s any doubt that IRIS can actually affect your brainwaves, Auger intends to

hook up each participant to an electroencephalogram (EEG) so they can see the readings before and after the experience and, if they want, get the results emailed to them. “I wanted to give people what I call a perceptual ride and a direct experience with how sensitive brainwaves are. What we’re doing is bringing people into what’s called an alpha state, which is kind of a flow state. That’s the intention. It’s a state you can achieve by just sitting and meditating. When you leave the installation, you’ll leave with, hopefully, more alpha brainwaves than what you started with. For some period of time, you may feel more relaxed, more alert, more aware. These are the kinds of qualities that are associated with that alpha state.”

IRIS, however, is not for everyone. The kinds of effects used to alter brainwaves could, potentially, have a negative effect on people using antipsychotics or who have epilepsy — it’s necessary to sign a waiver that includes a description of what the experience entails before participating. “People have raised these concerns, but if you go into a disco or if you go into Meow Wolf or a concert, the strobe lights used in those types of situations are flashing in ways that are as much, or more, than what we’re doing,” he said. Still, better safe than sorry. “We’re being very intentional about this experience, to give people a perceptual ride that’s very pleasurable. But I will say it’s intense. It’s designed to bring people into almost immediate relationship with these phosphene patterns.”

Auger is bringing IRIS to Nevada’s Black Rock Desert in September at the Burning Man Festival’s Mystopia theme camp. There, the project will be realized on a larger scale, in an octagonal structure with room for up to eight people at a time. “A lot of our interest in this, and especially the long-term interests of some of the the researchers, is really this idea of communal entrainment,” he said. “This is not a new concept. Navy SEALs learn some of the techniques that we are using in order to bring their teams into these communal states of entrainment, where they work at their absolute optimal, in these deep flow states where they’re able to achieve their goals without being distracted by stress. Part of my motivation as an artist is just my observations and my own experience of just how agitated society has become and how our senses, individually and collectively — from our visual to tactile to auditory — have really gotten hijacked by media and the level of conflicting information we’re given. I think it’s one of the most profound challenges we collectively face. It’s one of the reasons I’m introducing this into my art. My overarching intention and desire is to bring people back to their senses.” □