

SPACE Lab

[co-creative art-astronomy experiments]

SPACE Lab is a year-long project that will show an expanded field of experiments as artworks co-developed by artists with astronomers. Many art science collaborations are not as co-creative as they could be. It is our intention to initiate artist-astronomer projects that question the notion that art cannot engage significantly with science beyond communication of research for public engagement.

For scientific institutions or organisations, such collaborations are often perceived as “art in the service of science” where outcomes of art-science collaborations are primarily seen as a means to communicate difficult scientific concepts to the public. It is rare that art becomes an acknowledged, integral ingredient in producing scientific knowledge. (Kuchner, 2022)

RETHINKING THE STRUCTURE OF ART- SCIENCE COLLABORATION.

Art and science share curiosity driven questions and both rely heavily on creativity. These connections are largely overlooked due to structural differences between the disciplines that influence artists and scientists from their education onwards. Despite their differences, both art and science are about creating and exploring new knowledge.

SPACE Lab creates a place that encourages conversation, exploration and serendipity. Artists and scientists will work together on specific research areas during the duration of the project.

Over the next year we will facilitate in-depth conversations between artists and astronomers and help to integrate their understanding of research questions to create opportunities for co-creative experimentation and risk taking.

The groups will have time to communicate their positions and questions, and the year-long process will allow for important periods of individual thinking and making between these exchanges. Time and space for discussion will be encouraged to enable experimentation, contemplation, questioning and understanding towards each other.

AN EXPANDED FIELD OF EXPERIMENTS AND INTERVENTIONS

The end-result of SPACE Lab will be presented during a two-week long exhibition at APT Gallery in Deptford, South London, followed by a week-long gallery 'take-over' by young people from the local area. Throughout the year, SPACE Lab will initiate meaningful co-creative opportunities for diverse young people from socio-economically deprived areas of Lewisham. Astronomy can be perceived as an elitist subject that is not open to applicants from all backgrounds particularly those with low science capital. This project will challenge this assumption and partner with an exciting team of professionals to achieve this aim.

HACKING DISCIPLINARY-SPECIFIC METHODOLOGIES AND WAYS OF THINKING

The project will provide a multi-layered programme of a number of interdisciplinary STEAM (science, technology, engineering, arts and maths) initiatives to school children and the general public. One example is that our program aligns with the preparation for the launch of the European Space Agency's next big space telescope mission, Euclid, for which we will have access to spacecraft models at 1:4 scale to use during events.

An exciting team of creative computing artists and scientists will lead workshops that link technology, creativity and science towards an art astronomy exhibition. Examples that will be developed further are:

- a "Space up your life with electronics" workshop in which participants explore basic circuit design and LED lights using free, online electronics software. We will explore space travel and electronics using Arduino, simple coding and wiring.
- a 3D Modelling workshop invites young participants to design an experimental telescope using 3D design software. During the exhibition we will team up with the European Space Agency and work with their materials and models for the Euclid space telescope.

TIMELINE

- 12/21 • STFC Spark Award funding approved
- 04/22 • official start of the project
- 05/22 • collaborations start involving micro-interventions between the fields of art, astronomy and technology
- 09/22 - 02/23 • workshops in schools
- 02/23 • exhibition at APT Gallery
- 03/23 • gallery takeover by young people

PROJECT COORDINATION & CURATION

Ulrike Kuchner is professionally trained and qualified in both art and science. She is a practicing artist, astronomer, curator and creative producer, based at the University of Nottingham. Nicola Rae is a multimedia installation artist and educator who engages with scientific processes and data in her artwork. Project partners include artist and educator Jazmin Morris (Creative Computing Institute) and Jane Hendrie from the Lewisham Education Arts Network. Artists will be selected from a combination of open calls as well as invitations and will be paired with scientists that are open to this inter-disciplinary experiment. We will seek advice from diverse and inclusive groups for guidance, support and involvement.

