

periastro
methodologies of curiosity within the fields of art and astrophysics

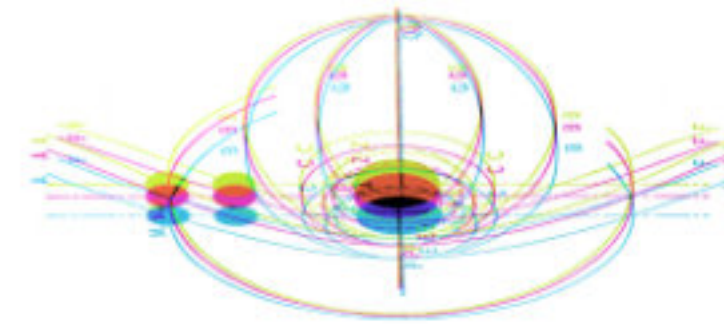
Periastra was a hybrid exhibition where artists and astrophysicists were invited to share each others' modes of exploring the world of celestial phenomena. Often thought of as mutually exclusive, there are sometimes surprising similarities in terms of the aspiration and expression of curiosity. The participants in this show have been identified through their interest in crossing this boundary and the result is an intriguing and visually rich interpretation of each others' fields of research.

The sky is a half of our environment and yet its nature remains elusive and a source of mystic inspiration. The very distance of its population removes our enquiry from direct interaction and launches out into the realms of speculation with barely adequate tools. Recent exploration by spacecraft and improvements in the operation of telescopes have returned vast quantities of data that require interpretation. This, in turn has required the adoption of models of increasing complexity and assumption. The advent of computing has accelerated this process but at the risk of losing that immediate contact with astronomical ontology.

The greatest telescope we possess is our ability to think imaginatively. What could the nature of this Universe be and how can we experiment in this grandest of laboratories? Is it at all possible to bring this realm into an Earthly laboratory let alone the enthusiast's shed? Little more than a century ago observational endeavours would result in, at best, the interpretation of a few grains of photographic emulsion. With every advance in technology, and the subsequent resolution in signal reception, has come an ever growing appreciation of the complexity we experience above our heads. This is a journey that has barely begun.

Curators note: In assembling this exhibition the interest has moved in the direction both of experiments in detection and demonstrations in the laboratory. Often, when thinking of astrophysics and the visual imagery that surrounds it, it is the overt phenomena that comes to mind; stars, galaxies and nebulae that we can see in the optical range.

However there exists a far more comprehensive electro-magnetic and particulate spectrum which provides us with a greater flux of information to hypothesize the mechanics of the Universe. And of course the biggest part of that 'detection of the invisible' is the procession of thought that emanates from the pursuit of curiosity.



periastra

www.cipango.co.uk/periastra

Periastra was an exhibition which took place between the 3rd to the 13th of February 2022 at the APT Gallery, Deptford, London.

Curated by Paul Malone

A·P·T
Art in Perpetuity Trust



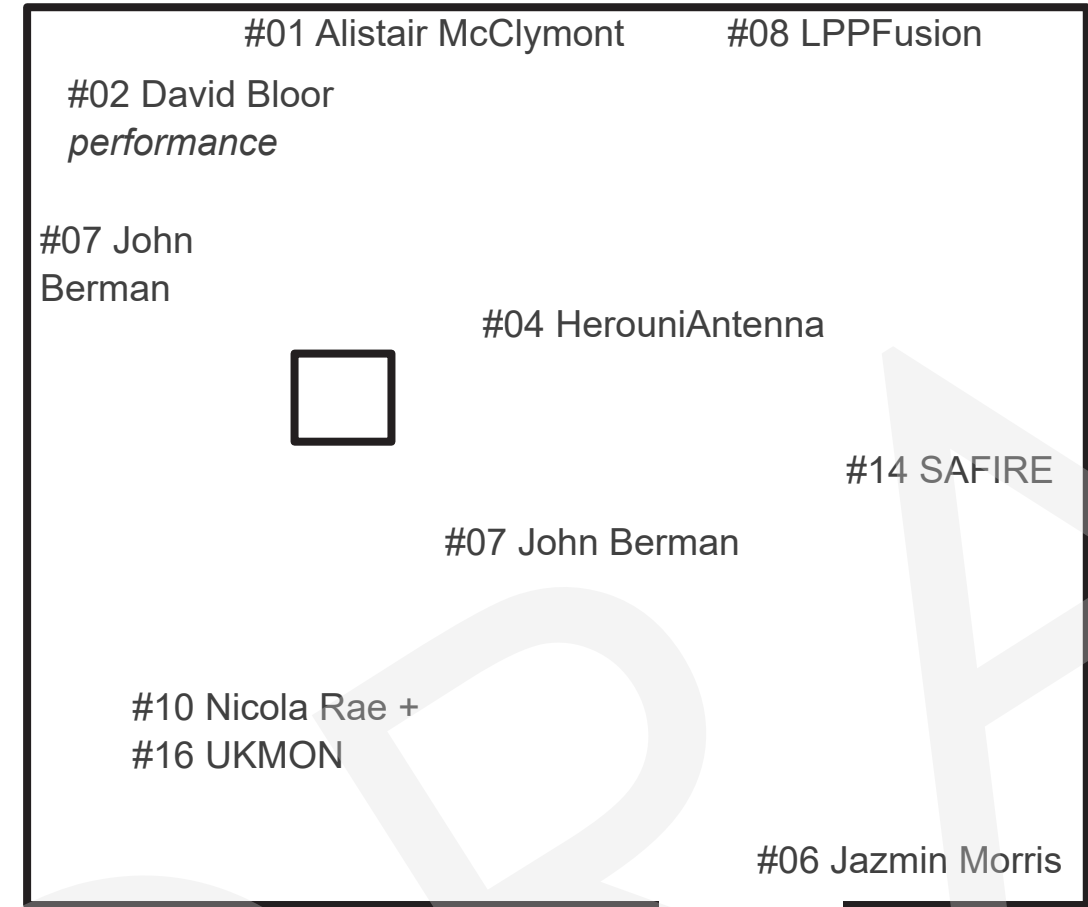
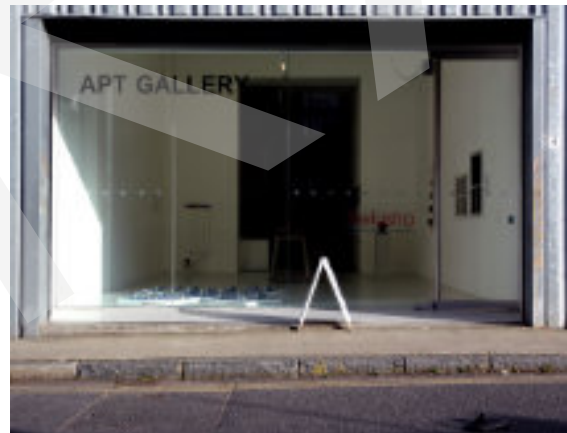
Participants

Alistair McClymont multimedia art
David Bloor sound art
Els van Riel structural film
Jean-Louis Rault, FRIPON fireball recovery
Herouni Antenna, Armenia optical radio
Jazmin Morris computational artist
John Berman muon detection
LPPFusion focus fusion research
Miles Mathis maths, charge field theory
Nicola Rae multimedia art
Paul Malone multimedia art
Richard Lawrence sculptor
Rupinder Khaira multimedia art
SAFIRE electric sun experiments
Steven Scott multimedia art
UKMON meteor detection



The APT Gallery, Creekside, Deptford, London

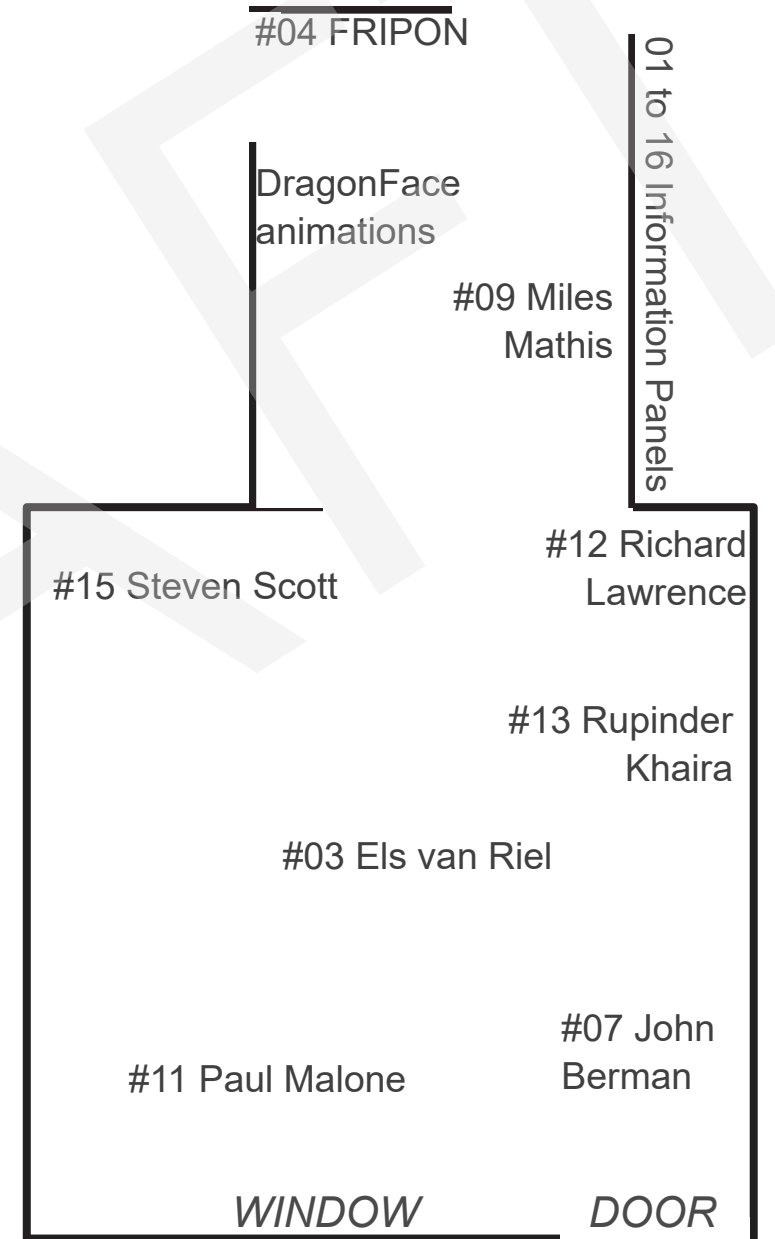
Periastrea at the APT Gallery



Above: Plan of rear darkened space

Right: Plan of front daylight space and 'Link' information hub

Layout of the exhibition



About the artwork

A feeling of solitude

This work is based on a quote from the astronaut Michael Collins

"I don't mean to deny a feeling of solitude. It is there, reinforced by the fact that radio contact with the earth abruptly cuts off at the instant I disappear behind the moon. I am alone now, truly alone, and absolutely isolated from any known life. I am it.

If a count were taken, the score would be three billion plus two over on the other side of the moon, and one plus God only knows what on this side. I feel this powerfully-not as fear or loneliness-but as awareness, anticipation, satisfaction, confidence, almost exultation. I like the feeling. Outside my window I can see stars-and that is all. Where I know the moon to be, there is simply a black void; the moon's presence is defined solely by the absence of stars."

(from "Carrying the Fire: An Astronaut's Journeys" by Michael Collins)

About the participant

Alistair McClymont is an artist working across a broad range of materials and methods. His work is a continuing process of discovery and experimentation, each piece follows the last in a continual journey of investigation into cultural and physical phenomena.

<https://alistairmcclymont.com>



'A feeling of solitude'. 2022. HTML, CSS, JavaScript'. Looking up at the projection

About the artwork

Universe

The work takes inspiration from 'The Universe Symphony' an unfinished work by American classical music composer Charles Ives.

Ives' work was conceived in 1915 and revisited in 1926. In a quote on one of the scores Ives imagines the work "striving to ... paint the creation, the mysterious beginnings of all things known through God and man, to trace with tonal imprints the vastness, the evolution of all life, in nature, of humanity from the great roots of life to the spiritual eternities, from the great unknown to the great unknown."

Much of life is unpredictable, using Ives's ideas around indeterminacy and musical quotation the work uses a self built 'slippery clock' to trigger events within a modular synthesizer. A system of action and reaction, appropriate response or equally appropriate non response or marginally appropriate inappropriate response.

About the participant

David Bloor is an artist and musician interested in how people respond to limitations, each other and their environment. His work includes installation, performance and recordings under the name 'Dirch Blewn' with releases for labels 'Linear Obsessional', London and 'Game of Life', Athens and a forthcoming release on 'Soft Error'.

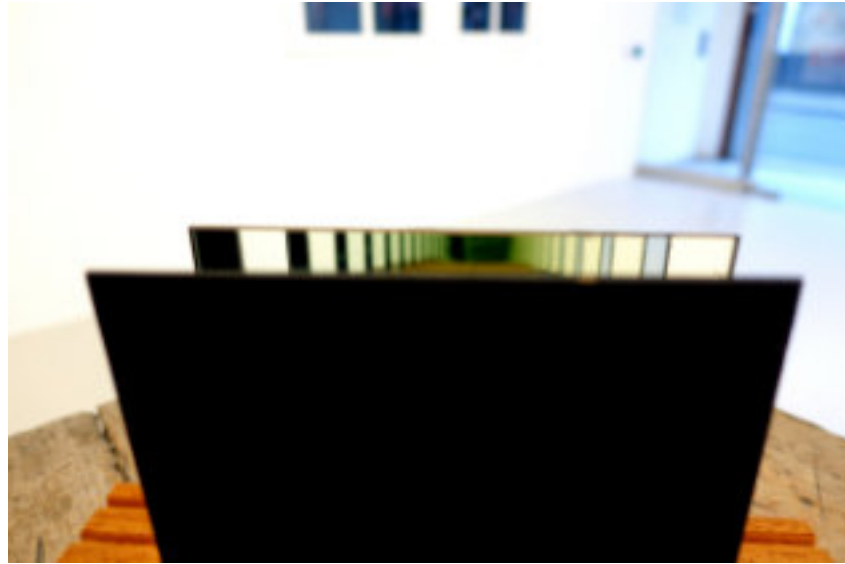
He works with kinetic sculpture, analog assemblage, modular synthesisers and a self built, 63 channel, 8bit, surround sound, off grid recording studio which forms the basis of '24hr Community Composition' which will be at Sanctuary Lab 2017 in the Galloway Forest.

He is currently an APT graduate studio award winner and co curating the APT summer exhibition - 'Touchstone'

www.dirchblewn.com



David Bloor in Performance: 'Universe'. Periastra 12th February 2022



About the participant

Lives and works in Brussels, Belgium. Studied photography and cinematography, and worked as a photographer, editor and producer for various photo, film, video and theatre productions.

Her films, video's and installations explore the impact of detailed changes in moment, movement, matter, light and perception.

With links to the tradition of structural film making, the work by the Brussels based film-and videomaker, Els van Riel, explores the basic elements for cinema - time and light - and develops a form for new aesthetic pleasure, bypassing any symbolism and narrativism.

For van Riel the projector is a central figure in the cinematographical act of giving form to a screening, performance or installation. The mechanical image source becomes actively present as if it were a living object.' (L'ART MÊME, April 2009)

About the artwork

Infinite² A small spatial composition touching the limits of physics and the need for unlimited imagination.

<https://elsvanriel.be>



Els van Riel: Infinite ²

About the artwork



Video of a compilation of various meteor radio echoes as examples of spectral analysis

About the participant

The FRIPON Science Project (Fireball Recovery and Inter-Planetary Observation Network) was designed to study interplanetary matter by detecting and characterizing fireballs (orbit, trajectory, size, etc..) and to recover fresh fallen meteorites to be analyzed in our laboratories.

www.fripn.org

The core program comprises five main scientific sub-projects:

- *Detection of fireballs and computation of their trajectories and orbits
- *Detection of meteorite fall event: computation of meteorite strewn fields, organization of meteorite search
- *Statistical determination of the origins and possibly of the parent bodies of the detected fireballs
- *Statistical estimate of the interplanetary particle impact flux
- *In-depth analysis of the recovered samples.

The FRIPON scientific project is operated by an international team of scientists, which combines the national teams of the countries involved.

The team develops and maintains an observational network of Internet connected cameras and radio receivers as well as the tools to retrieve and store the data in a database from which it can be accessed following the policy described hereafter.

All the programs developed and used in the FRIPON network are open source, and the scientific methods are shared and optimized to achieve the best use of data. Scientific coordination and animation of the network insures the efficiency of the collaborative work.



Jean-Louis Rault, FRIPON (Fr)



Jean-Louis Rault, FRIPON: Meteor cameras in various locations



About the participant

The main advantages of the Armenian radio-telescope are 1) High accuracy, 2) High sensitivity, 3) Very low self-noise. And the only disadvantage is that the antenna pattern scanning angle is limited to 120 degrees (instead of theoretical 180 degrees).

Planned observations under the management of Professor Herouni were done in 1987 – 1990. The Explosion of Red Giant Star was recorded (Etta star in Gemini constellation), multiple scientific articles were published in USSR periodical and abroad, Herouni has participated and presented results about ROT construction and parameters in a big number of International Conferences.

During the energy crisis of 1990-1995, numerous measurements of antenna parameters using the radio astronomical method were performed, new radio sources were registered by Professor Arevik Sargsyan and a group of young scientists and students led by her.

In 1995-2001, the old computer control system of the radio telescope was dismantled and replaced by PC and special software programs were developed. In collaboration with the Astronomical Union of Russia and the National Technical University of Athens Technology, research works were carried out on the development of radio telescope. Antenna feeding system has been updated and improved, various other antenna-related topics have been developed.

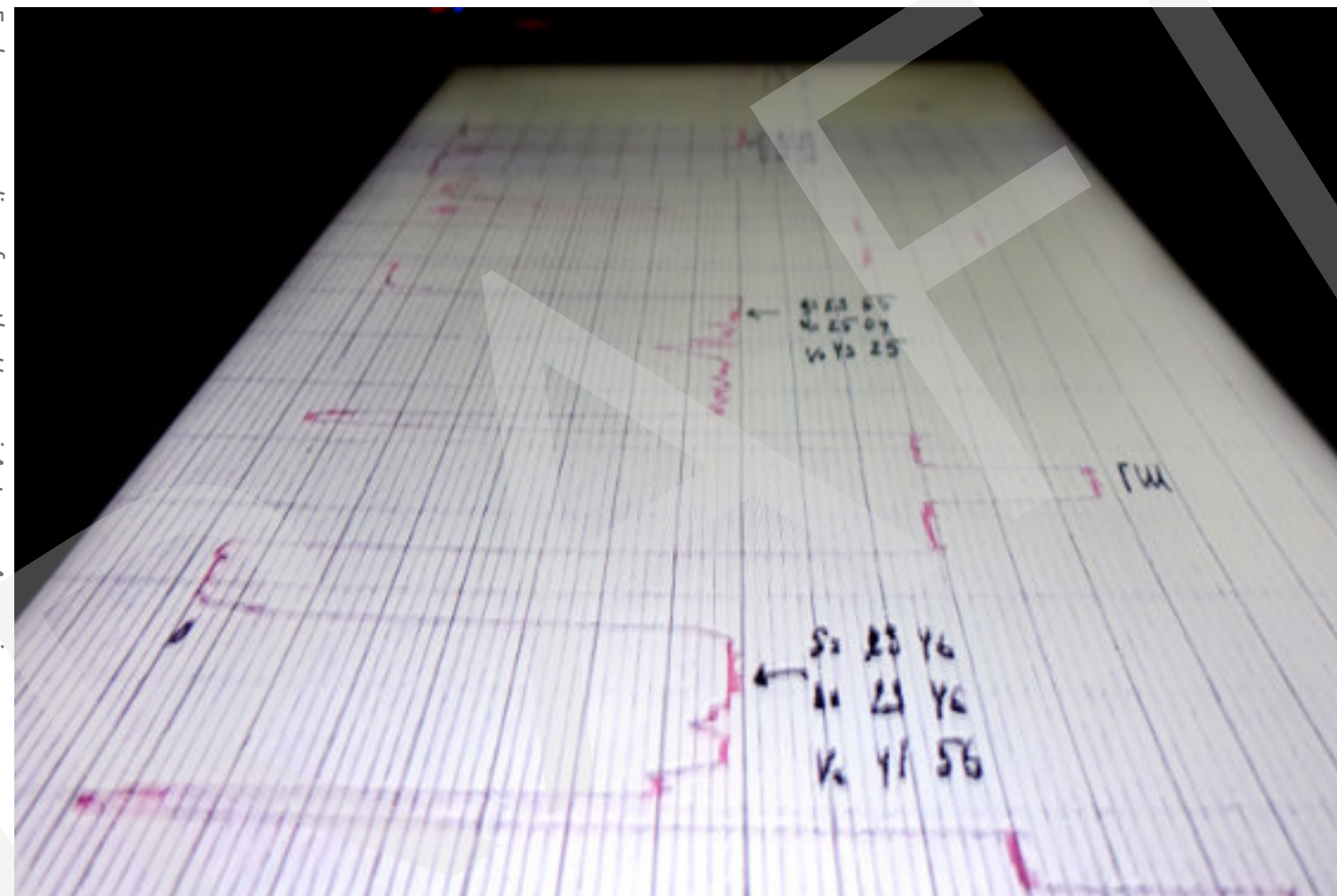
The ROT-54/2.6 antenna is in working condition today. The engines that provide motion of the antenna, the mechanical structural systems of both reflectors, several automatic control systems, including correcting systems, are also in working condition.

The antenna is equipped with feeds. Even today's uncomplicated state of the reflective surface allows us to measurements, making sure that the antenna maintains the values of its main characteristics in the decimeter and centimeter range of radio waves.

@HerouniUnitedSpaceCentre

Herouni Antenna (AM)

Early pen recordings from the Herouni Antenna, Armenia



About the artwork

Supplied from the archive are original pen recordings with annotations by the operators. These have been stitched into a scrolling ensemble that can be viewed as a movie presented in the horizontal plane. They originate from pictures of the records of various sources of space radio emission and antenna pattern measurement using the radio-astronomical method.

About the participant

Jazmin Morris is a Creative Computing Artist and Educator based in London. Her personal practise and research explore and challenge representation and inclusivity within technology.

She uses free and open-source tools to create digital experiences that highlight issues surrounding gender identity, race and power; focusing on the complexities within simulating culture and identity.

Jazmin is the Lead Digital Tutor on the Graphic Communication Design course at Central Saint Martins and a Lecturer in Creative Computing & Digital Outreach at UAL's Creative Computing Institute.

www.instagram.com/princessjazmin_art

About the artwork

'In-between Binary' is an experimental essay written by Jazmin Morris in the format of a README.

HIS-torically, black and/or queer folk and other marginalised identities have been undocumented and erased by colonial lenses. Now, the binary structures that are facilitating our existence continue to sensor, surveil and delete.

We are presented with interfaces that feed addiction but do not water expression.

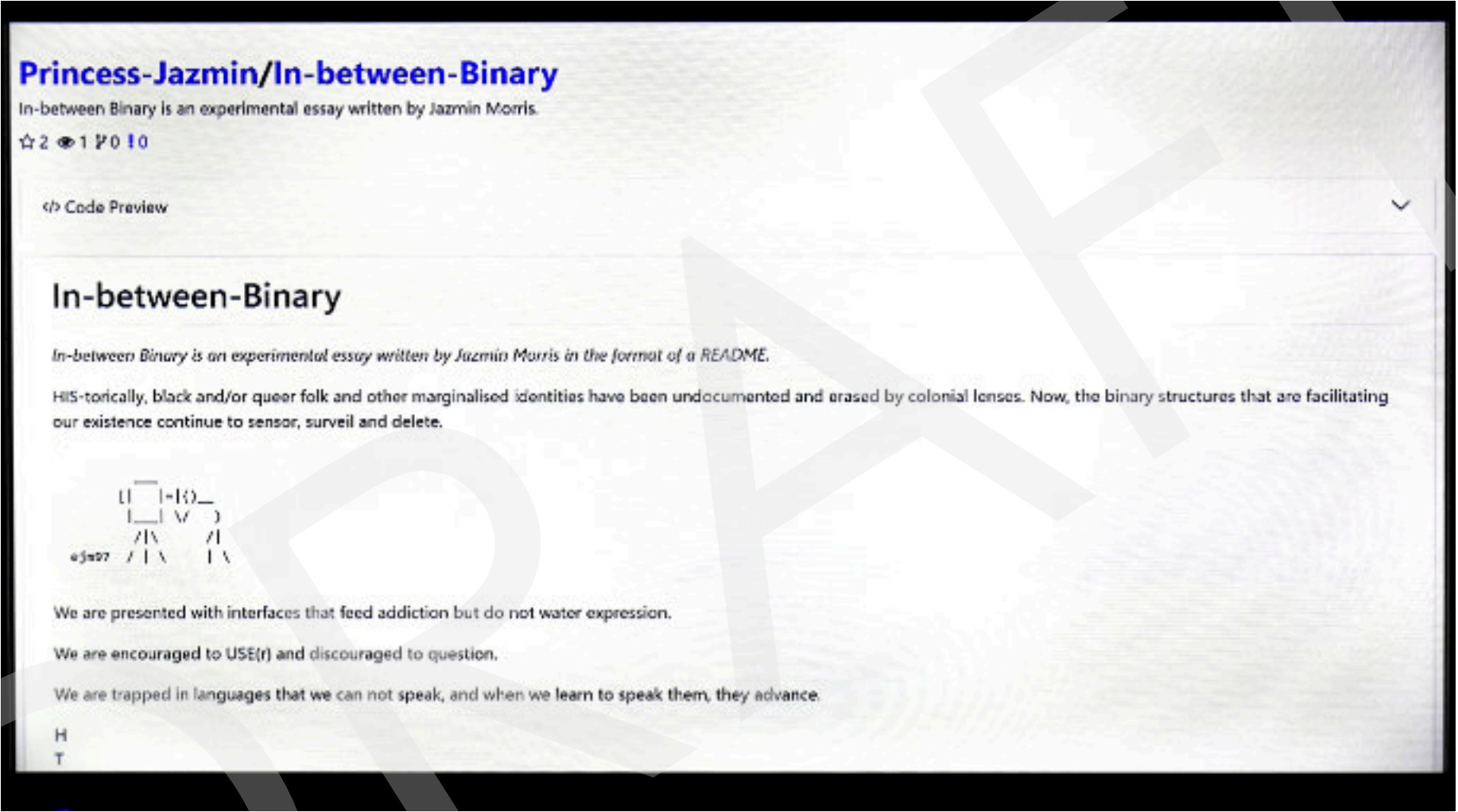
We are encouraged to USE(r) and discouraged to question.

We are trapped in languages that we can not speak, and when we learn to speak them, they advance.

H
T
M
L

Stands for HyperText Markup Language.

My HTML stands for Hope, Transcendence, Moon, and Love



Jazmin Morris: 'In Between Binary'



github.com/Princess-Jazmin/In-between-Binary#readme

About the muon detector

Where do Cosmic Muons come from?

Muons are generated in the Earth's upper atmosphere by cosmic rays (particles) colliding with atomic nuclei of molecules in the air. The muon only has a lifetime of 2 millionths of a second so, given that they will travel over 10,20, 30 km how are there any left to detect at the surface?. How are we able to detect them?

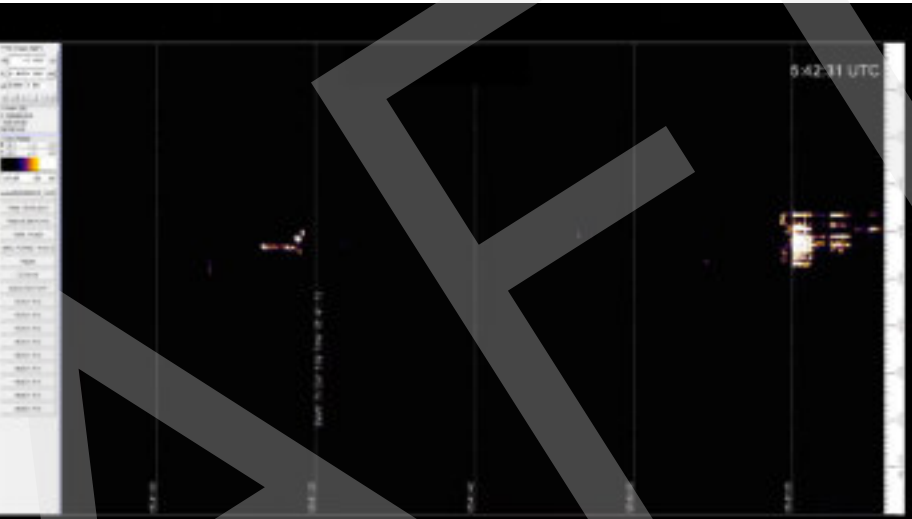
There are several ways to detect muons, some of which are quite expensive. I have opted for a Geiger Müller (GM) tube, they are low cost and require relatively simple electronics. A GM tube will detect alpha particles, beta particles, gamma rays and Cosmic Muons. If we have one or more detectors then we can stack them. An event registered on all GM tubes simultaneously will be a muon and not background.

The two detectors in the device are currently working independently as I need to build the interface electronics. Each time an event is registered the blue light flashes, once the interface is built, I can then determine simultaneous events which will be Muons.

John will also showed a video of meteor detection and examples of his astro-photography.

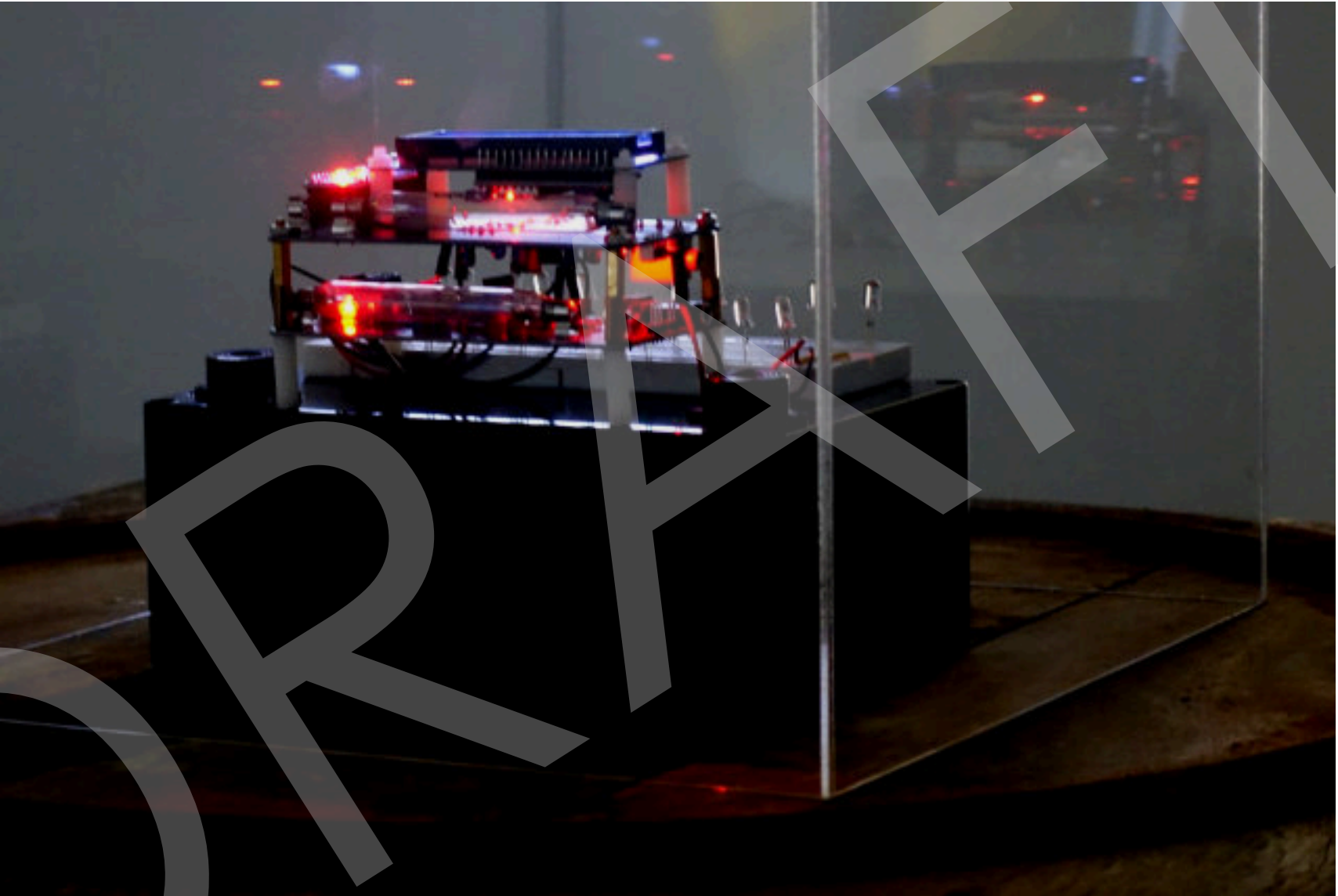
<https://radiometeordetection.org>

Meteor detection and astro-photography



Above: Meteor detection video by John Berman

Below: Selection of astro-photographs taken by John Berman



John Berman: Cosmic muon detector

About the participant

Fusion energy can fully replace fossil fuels at much lower cost to our health, our ecosystem and our pockets – while at the same time providing grounds for more equality and better standard of living for all. LPPFusion is a high tech R&D company developing clean Focus Fusion technology.

LPPFusion’s mission is to provide environmentally safe, clean, cheap and unlimited energy for everyone through the development of Focus Fusion technology, based on the Dense Plasma Focus (DPF) device and hydrogen-boron fuel.

LPPFusion’s nuclear fusion energy R&D project will produce safe and clean energy without any radioactive waste. Our project was initially funded by NASA’s Jet Propulsion Laboratory. It is now backed by over 500 private international investors including the Abell Foundation of Baltimore.

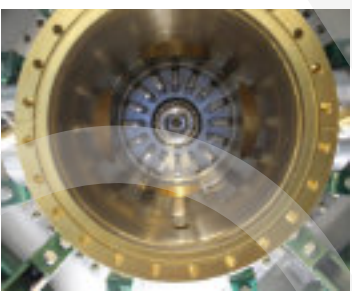
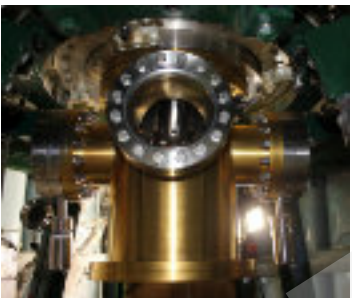
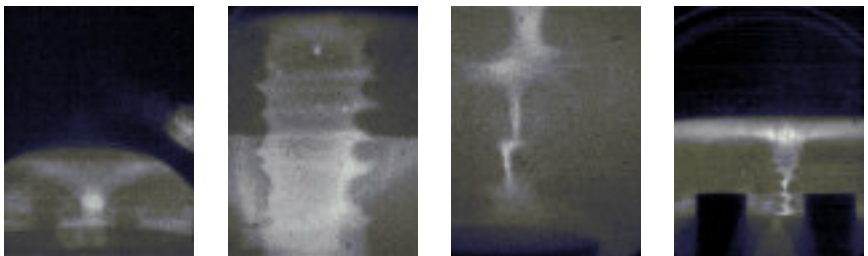
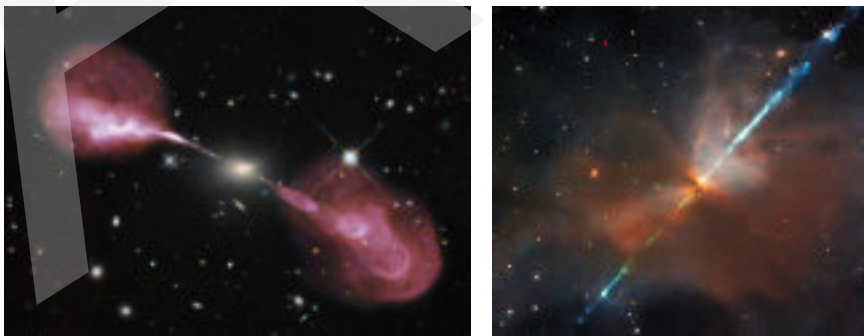
LPPFusion’s patented technology and peer-reviewed science are guiding the design of our fusion energy based visions of future; a future where humans and planet come before profits. Fusion energy generators can produce virtually unlimited source of environmentally clean energy thanks to the energy density of the novel, aneutronic pB11 (boron) fuel.

We are working to demonstrate the scientific feasibility of Focus Fusion experimental generators at our laboratory in Middlesex, NJ.

About the artwork

The discovery by Hannes Alfvén and his colleague Carl-Gunner Fälthammar of the basic role played by filaments of current in the cosmos in the formation of structure, from stars up to galaxies, laid the basis for understanding filamentation in the plasma focus device.

Similarly, LPPFusion Chief Scientist Eric Lerner’s research in the 1980’s using the formation of a plasmoid in the Dense Plasma Focus, as a model for understanding quasars, led to the formulation of a quantitative theory of the functioning of the DPF. This theory in turn predicted that the plasma focus could be used for pB11 (boron) fusion



Above: The device
Opposite page above: Jets from galaxy Centaurus A and stellar Herbig Haro object HH111
Opposite page below: Device on firing showing plasmoids and Peratt instabilities.



LPPFusion: Projection of actual scenes from the laboratory

About the participant

When we become too secure in our knowledge, we stop questioning. Failure to question is the ultimate scientific failure. Answers quit coming precisely when they aren't sought, and they aren't sought precisely when they are (erroneously) thought to be in hand. We are like the dog who discovers how to use the little flap-door and now considers himself master of the house. He lies in front of the fire and congratulates himself for his cleverness. He would be better outside chasing rabbits.

Solar gamma rays

In May of 2019 it was reported widely that the Sun was mysteriously emitting gamma rays at a rate about seven times previously thought or predicted. Also a mystery was a gap in the emission spectrum at about a trillion times the frequency of red light. Here is what one of the researchers said at the time:

"It's amazing that we were so spectacularly wrong about something we should understand really well: the Sun," said Brian Fields, a particle astrophysicist at the University of Illinois, Urbana-Champaign.

In the linked paper, we are told the gap is at about 40 GeV. Interestingly, there are large particles predicted at that mass, called tt vector mesons. Since the proton has a rest

energy of 938 MeV, that is an energy of about 42.6 protons. You may already see where I am going with this: since the proton will not be at rest in any comparison here, we have to compare the gamma ray to an equivalent proton.

What do I mean? I mean that if the Sun is turning selected gamma rays into protons by slowing them down and converting energy to mass, it would not do that by stopping them cold. It would do it by spin downs of the sort I have shown you over and over, as in magnetic reconnection. Edge hits between photons in a very compressed charge field would transfer energy on the tangent (photon edge) from linear to spin energy. The photon would slow down below c , and the energy that was previously in c would go to a series of stacked spins.

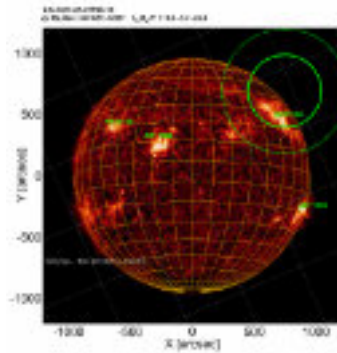
Those stacked spins are what we call mass, since they have both radius and energy equivalence. The gamma ray would become the proton. And by that mechanism the Sun would mop up most gamma rays at that energy, creating a gap.

To read the full paper visit:

milesmathis.com/gamma.pdf

Solar gamma rays: FermiLAB

www.milesmathis.com



Miles Mathis (us)



Miles Mathis: Solar gamma rays

About the artwork

'Meteor Sightings Reframed' 2022

The meteor sightings in this installation were recorded by a community of amateur astronomers that form part of the citizen scientist project UK Meteor Observation Network (UKMON).

With over 100 cameras networked across the UK running open-source software using Raspberry Pi 4, they engage in collaborative teamwork to triangulate where meteors have fallen as well as the open sharing of data. As they note: ‘Amateur astronomers have always made a significant contribution to the field of meteor astronomy from its earliest beginnings through visual observations’ (UKMON, 2022).

UKMON’s films have been reframed through being back projected onto weathered aluminium portholes salvaged from a WWII concrete minesweeper in Essex, throwing images forwards and backwards within the space. The installation continually shifts focus between porthole screens, allowing the transitory appearances of meteors and fireballs to retain an unpredictability of presence and trajectory.

Investigations into Herschel’s 20 foot telescope informed the A-frame scaffolding structures erected to support the portholes. William and Caroline Herschel are referenced as amateurs whose obsessive curiosity led to them becoming valued professional astronomers.

About the participant

Nicola Rae's interdisciplinary art practice engages with scientific and natural processes explored in installations that include digital technologies, analogue equipment, physical computing and found objects.

Since 2008, a series of installations visualising the sonic have responded interactively to a variety of acoustic sources and microphones picking up co-produced sound as well as site responsive experimentation. Other sound frequency installations have responded to online recordings of electro-acoustic phenomena as well as interdisciplinary collaborations with scientists and their research data.

Collectively initiating and co-curating exhibitions with others has become another important aspect of her working process as an artist. Encouraging longer set up times that allow for on-site experimentation and collaboration is of continuing interest.

www.nicolarae.co.uk



Nicola Rae: Meteor Sightings Reframed, 2022

About the artwork

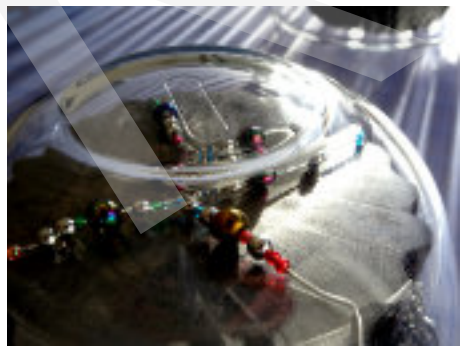
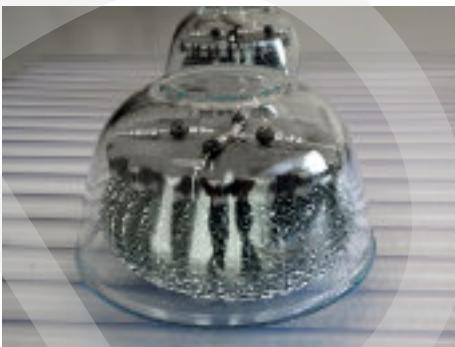
'Particulate Aether Detector' 2022

Plastic roofing sheet, insulating sheet, steel, pan scourers, basalt and silver beads, pyrex.

This artwork represents a model for a particulate aether detector, similar to the DUNE facility at FermiLab and Super Kamiokande in Japan, which, however, are used for observing neutrinos.

In this visualisation the detectors are for sensing the flow of particulate aether in the form of base level (infra-red) photons. This field underpins the mechanics of electro-magnetism and other natural phenomena.

The sensors in the 'wings' of the detector reside in monochrome. However in the centre, where the spin fields interfere, the clapotis generates a burst of random colours. In this scenario neutrinos are seen as spin waves generated in the particulate aether field.



About the participant

I have always been interested in how the physical world comes to be here; how it originated, how it maintains itself and what is its relationship to consciousness. Specifically, I am interested in experimenting with the perception of surfaces as a gateway into this domain.

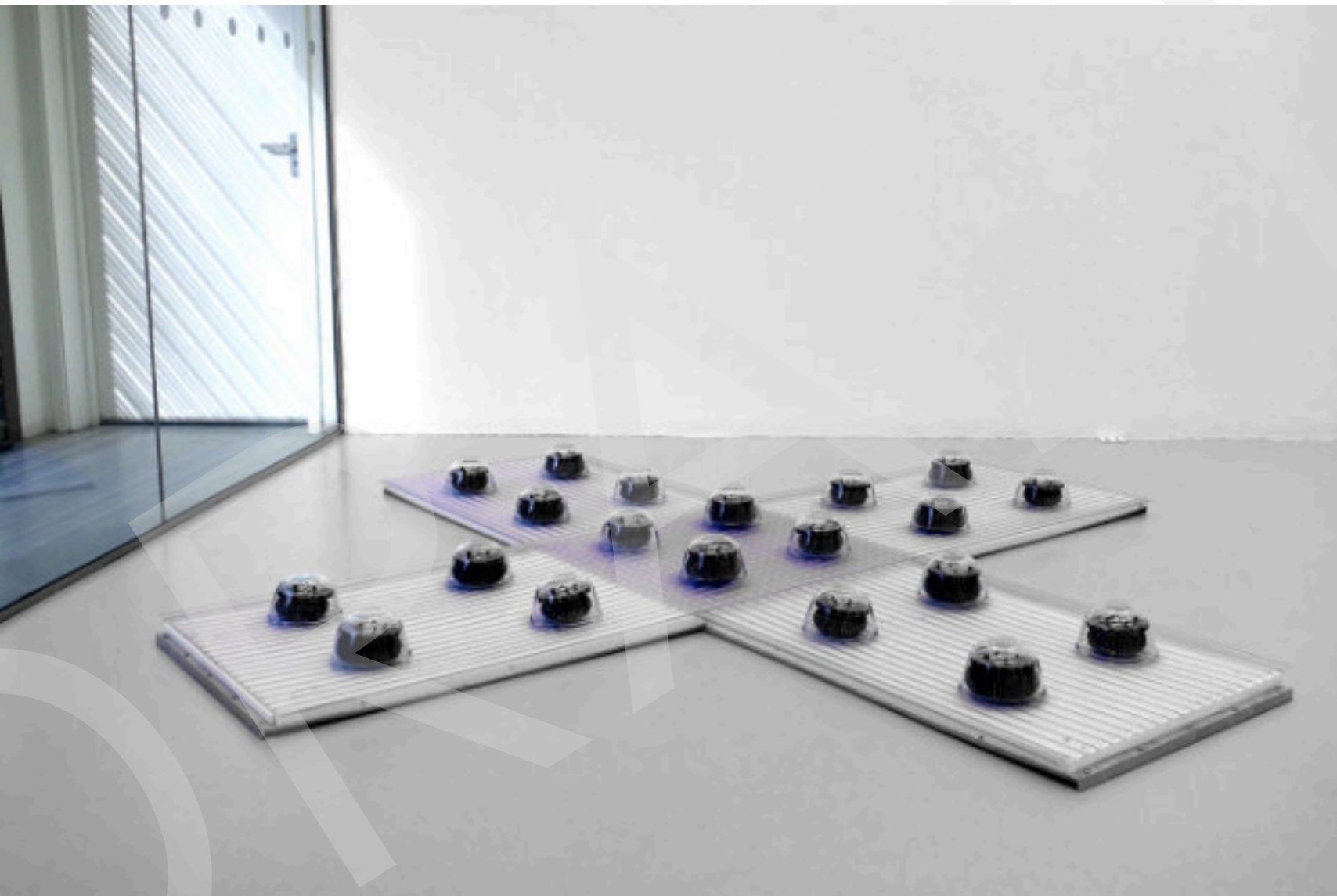
Most recently I have been constructing models of the phenomena of aether and its effects on the natural world. This is mainly in the theatre of astrophysics and associated fields.

In parallel I have been engaged in producing artworks in the form of 00 scale model railway objects. These highlight the dangers inherent in an over-reliance on model-making in the application of Bayesian Analysis in the pursuit of science.

I studied Fine Art at Reading University for B.A. Degree in 1976 and MFA in Sculpture at the Royal College of Art in 1980. Since leaving college I have worked in studios based in the London districts of Waterloo, Greenwich and, most recently, Art in Perpetuity in Deptford, London.

www.paulmalone.co.uk

Left: The transmutation from monochrome to colour



Paul Malone: 'Particulate Aether Detector' 2022'

About the artwork

'Mercury'

The smallest planet in the Solar System and the closest to the sun a rocky planet with a metallic/iron core, possibly still molten.

I have carved most of the planets but in my carved Solar System scale is not proportional my Jupiter is only twice the size of Mercury and I have carved two versions of our moon both bigger than Jupiter. I have tried to carve the surface of my planets in such a way as to inform the salient nature of that planet for example, Jupiter, I have carved the stone to form a look like a gaseous ball.

Mercury, I carved in a red sandstone, pitted the surface with craters like the moon, then poured molten lead in to those craters. The sculpture looks very tactile a look I wanted in all my planets. I wanted it to look like you could feel the interior dynamics.

About the participant

I graduated from Wimbledon school of art in 1982 since then I have had a studio in S.E London. From 1995 my studio has been at APT in Deptford, where I am a founder member. (cont)

www.instagram.com/deptfordlawrence1

My practice is sculpture, I started out carving wood, Elm, Beech, Oak to name a few, I am now back working in wood, carving and sometimes constructing. Between these two spells, I carved stone and worked in clay and plaster. I carved Granite on two symposiums one in Scotland and one in China. I have completed public commissions in stone, some locally Woolwich and Abby Wood and others further afield, in Sao Paolo, Brazil.

I have also completed public commissions in wood. In 2001 I carved and installed a set of steps at Enderby Wharf, East Greenwich. The steps descend in to the Thames and are submerged by the high tide. The wood I used is Opepe, a tropical hard wood. I carved in relief the history of Enderby Wharf.

In 2001 I won a sculpture competition, it was a commission to create a sculpture for Deptford Creek. A requirement was that the sculpture expressed something of the tidal nature of the Creek. I proposed a stone carving of the moon. Due to a lack of funds, it never went ahead, but I carved a small version and went on to carve most of the planets of the Solar System plus a Comet.

For some years I modelled clay and cast in to plaster often combining found objects-plastic bottles etc. My subject in this case, was animals quite often of the Arctic region, the context was climate change, pollution and loss of habitat. This subject I have carried over in to my current wood carving both in sculptures and wood cut prints.



Richard Lawrence: 'Mercury'. Red sandstone, lead

About the artwork

'Introspection'

The concept of this work reflects on the idea that when things are seen clearly, without judgement or labels there is a an opportunity to transform and change our own awareness.

I wanted to convey this notion with particular focus on the repetition of occurrence, the highs and lows of challenging mind consciousness and the disparity of perception.

I have worked with raw materials, and clear forms in reflection of seeing things as they are, in its true nature



About the participant

I am interested in the things we can't see but experience...

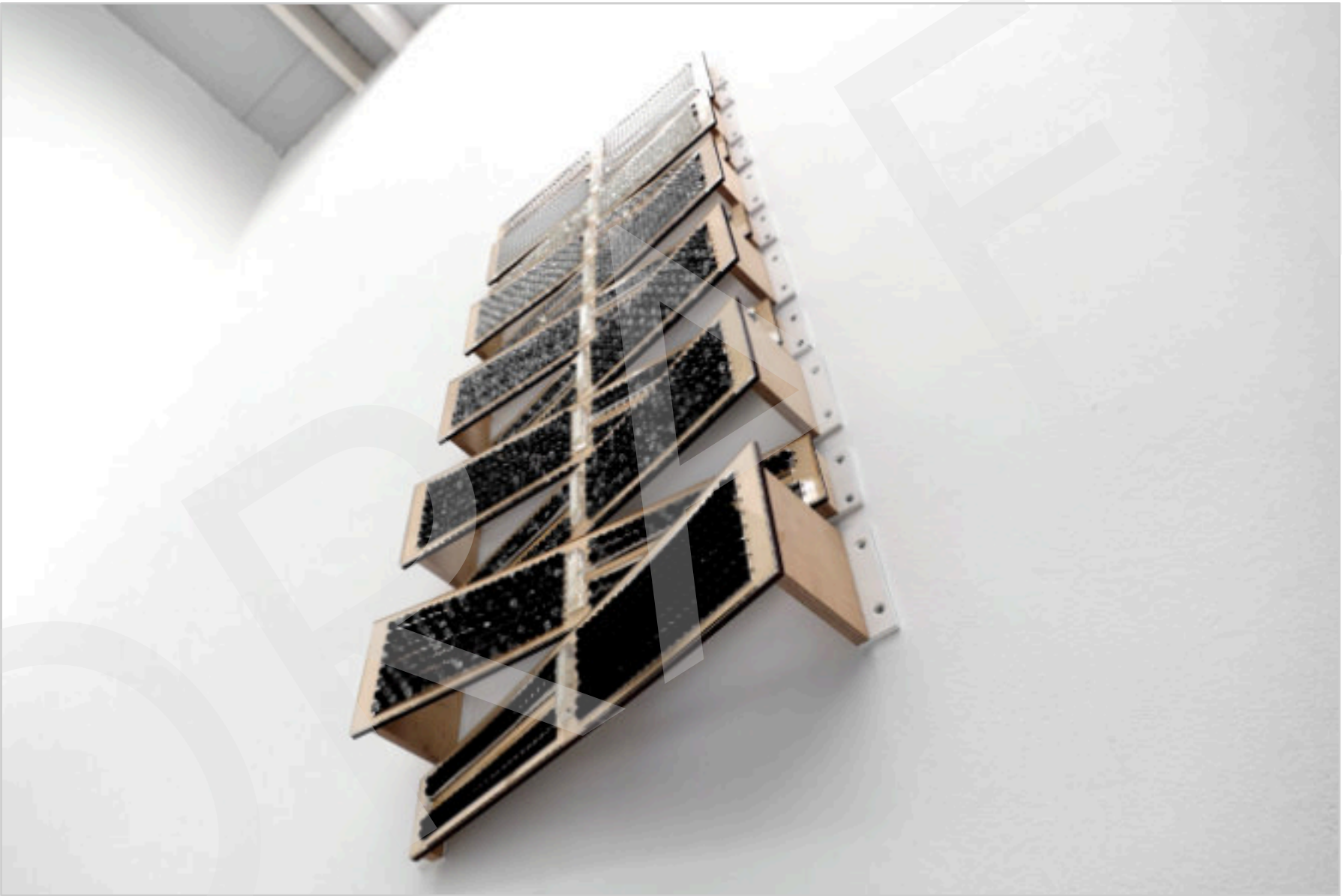
I am Ria Khaira, a recent graduate in MA Fine Art at the University of Creative Arts Canterbury (September 2021), specializing in exploring phenomenology, Buddhist philosophy and scientific perspectives.

I am interested in the components that affect our experience and interaction with the environment. My recent work explores questions related to whether objects exist independently or dependently through the Buddhist philosophy of 'emptiness', investigating whether all objective existence is reliant on the 5 aggregates of form, sensation/feeling, perception, mental formation and consciousness. The term 'Emptiness' reflects the nature of objects (including human beings) being empty of an inherent self and full of the cosmos (Hahn 2012).

My research in this theory has sparked an interest in various philosophical perspectives such as intentionality, dualistic monism, structural semiotics/language, Daoism, Wu Wei and scientific standpoints from the likes of Physicist Karan Barad, and scientist David Bohm.

I have several art practices that are all part of my creative development and ideas, such as automatic painting, digital collage, screen printing, ceramic/ cast work and mixed media installations.

<https://www.riakhairart.com>

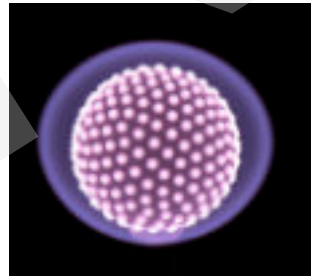
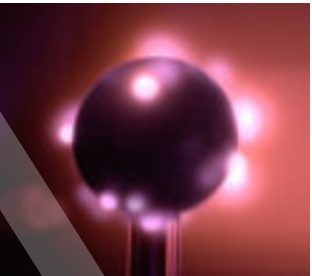


Rupinder Khaira: 'Introspection'

About the artwork

Projected in the rear gallery is the ignition of the firing sequence of the sphere within the vacuum chamber. These first few seconds have been slowed down several times to see in more detail the initiation sequence.

Here you can see the 'anode tufts', balls of arcing plasma suspended in a glow discharge, that emulate the granulations found composing the surface of the Sun. Evident also are the halos of 'double layers' (Langmuir sheaths) that act like 'electric waterfalls' interpreting the potential drop, in a step-wise fashion, from the anode to the surrounding electrical environment.



About the participant

The Safire Project is a set of laboratory-based experiments to 'explore the role of electricity in stellar and planetary phenomena', in particular, to independently test the Electric Sun theory.

1) Based on a 'Design of Experiments' approach, and using a SCADA control system, Safire focuses primarily on observation and experimentation, instead of theory and simulations.

2) Experimentation takes place in a large vacuum chamber, that has also been described as 'A Star in a Jar'. The wide variety of data generated by the chamber allows a comparison with data retrieved from the Sun, that is more than just a visual comparison. SAFIRE is an acronym for 'Stellar Atmospheric Function in Regulation Experiment'.

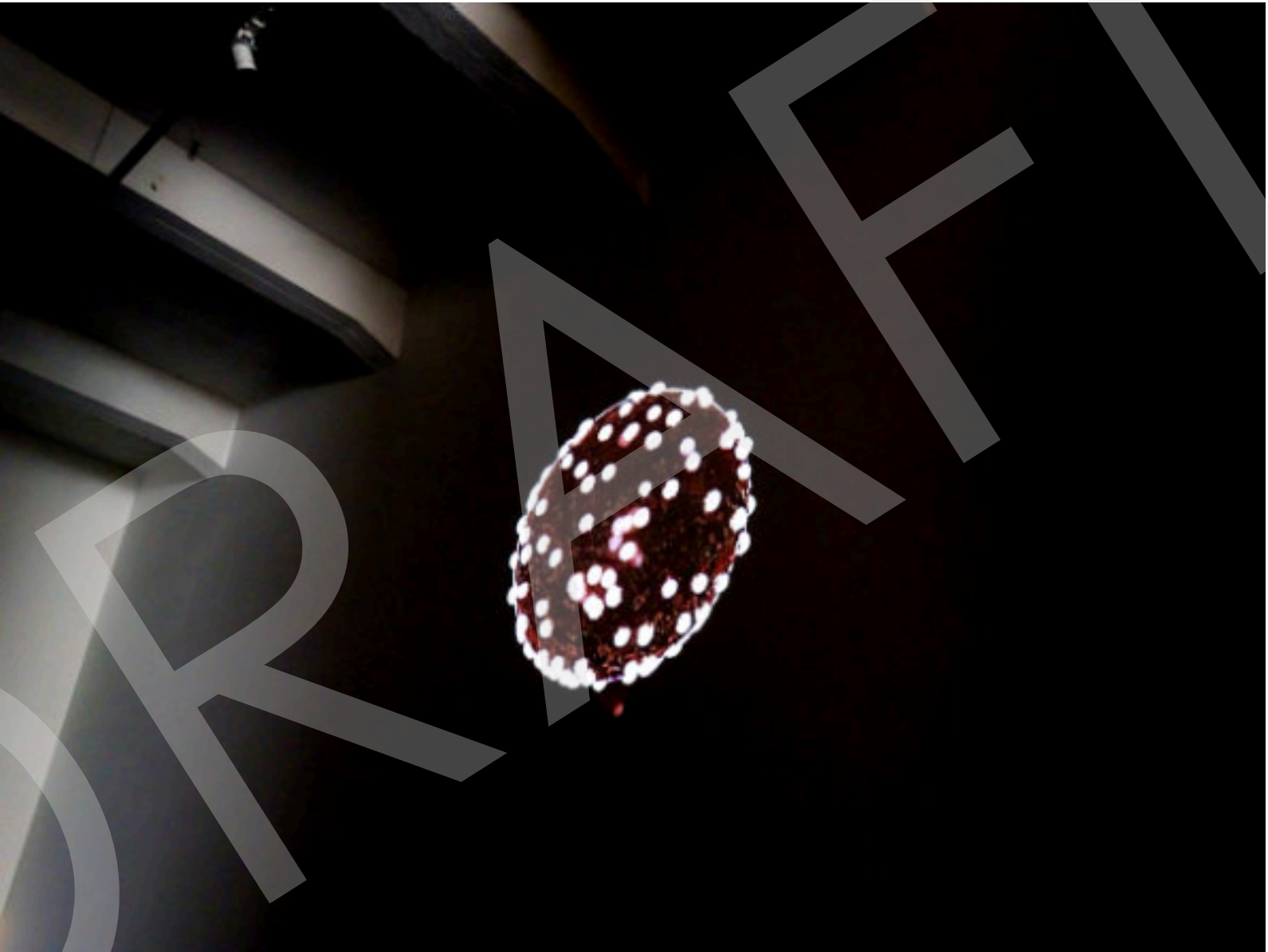
To date, the Safire Project has not found any disparities with the EU/ES model.

<https://safireproject.com>

Above left: Phase 1. Design of Experiment. Bell jar

Left: Phase 2. The vacuum chamber with anode ball. Either side shows the development of anode tufts and double layers

SAFIRE (US)



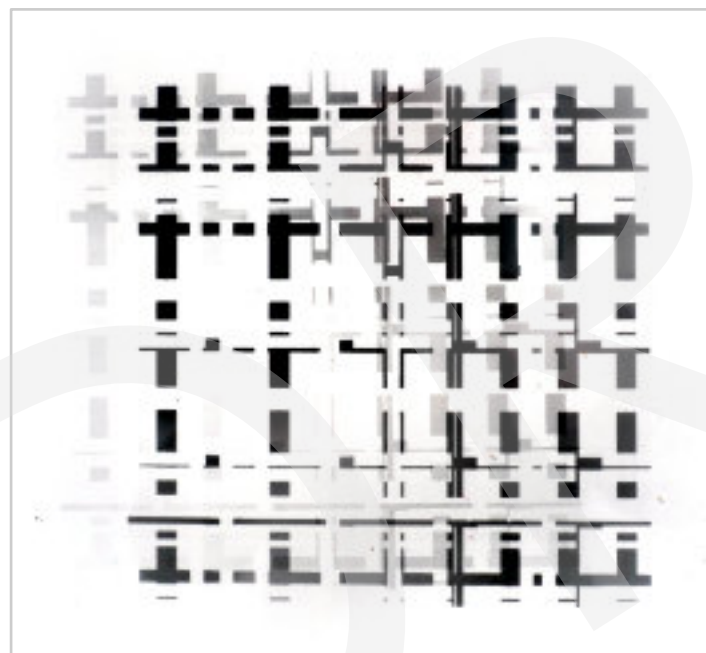
SAFIRE: Enlarged projection of central sphere under test. Note the anode tufts

About the artwork

Four LED clocks, hacked to display default zeros at slightly different intervals

Two double exposed photograms

This composite work continues my research into the presentation of interference patterns formed from the interplay of repeating parts. Here these repetitions result in misalignments that might function both as an index and as a schematic representation of that interplay..



Above: One of two double exposed Photogram in the exhibition

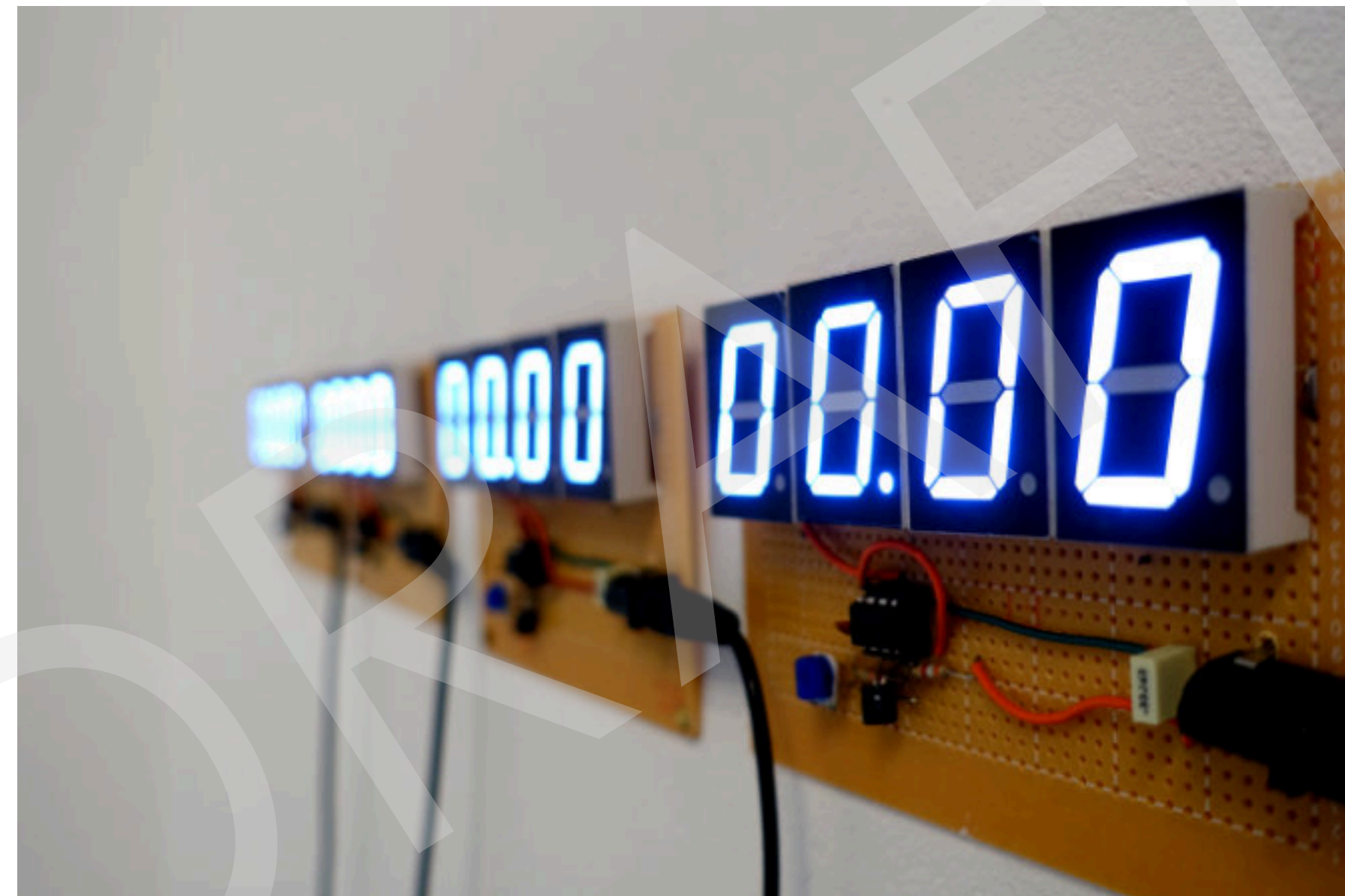
Right: Complete installation in the exhibition

About the participant

Steven Scott is a London based artist working with moving image, light, photography, text and print. He utilises processes of mirroring, repetition, phasing and extended duration so that the perception of movement and stasis may become indistinguishable and the image and its subject begin to separate.

He has recently completed a PhD in Fine Art at the Royal College of Art, London. Some recent exhibitions include: Galerie Ruimte Morguen, Antwerp, Belgium; Casa Contemporanea, Sao Paulo, Brazil; Focal Point Gallery, Southend; Dyson Gallery, RCA, London and the Contemporary Art Platform, Kuwait City, Kuwait

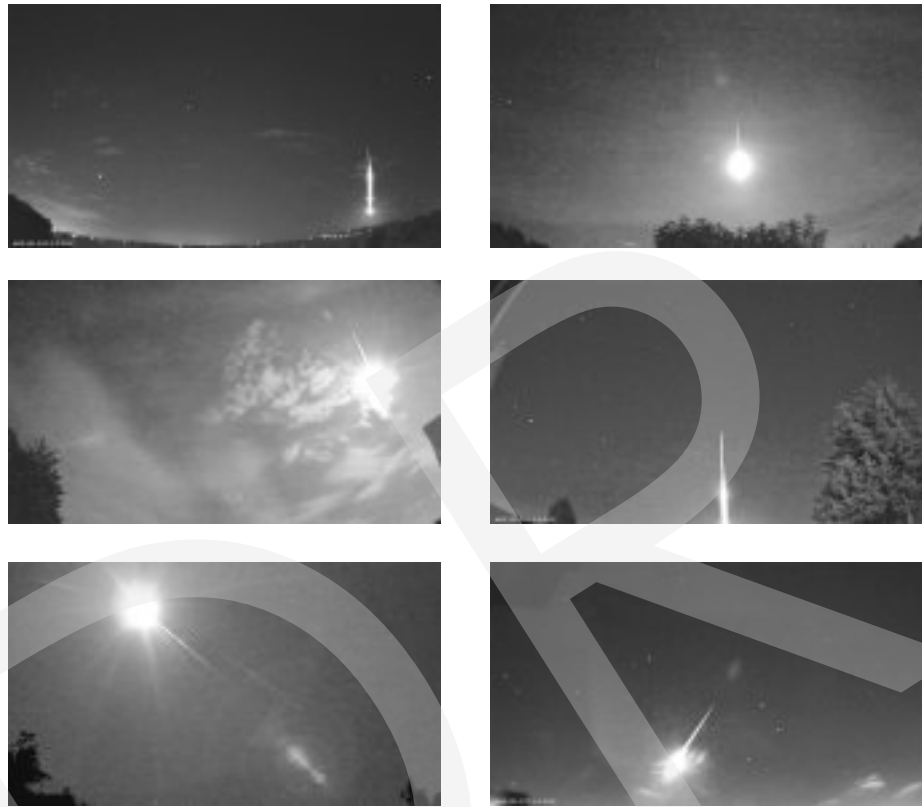
www.steven-scott.co.uk



Four LED clocks, hacked to display default zeros at slightly different intervals

About the artwork

Nicola Rae will be presenting a medley of fireball videos collected by the UKMON members. These will be projected onto an installation she will be constructing in the rear gallery space.



Above: Examples of photographs from the UKMON network of cameras

About the participant

Network of 90+ detection cameras recording meteors and fireballs over the United Kingdom. A thriving community of Citizen Scientists just enjoying their hobby.

UKMON is all about team work and collaboration, and having some fun along the way. It is a hobby after all, albeit one with very serious scientific intent.

Our core principle is the open sharing of data with meteor observers worldwide. When not busy on the day to day running of UKMON we are working hard to expand our network by encouraging others to join in.

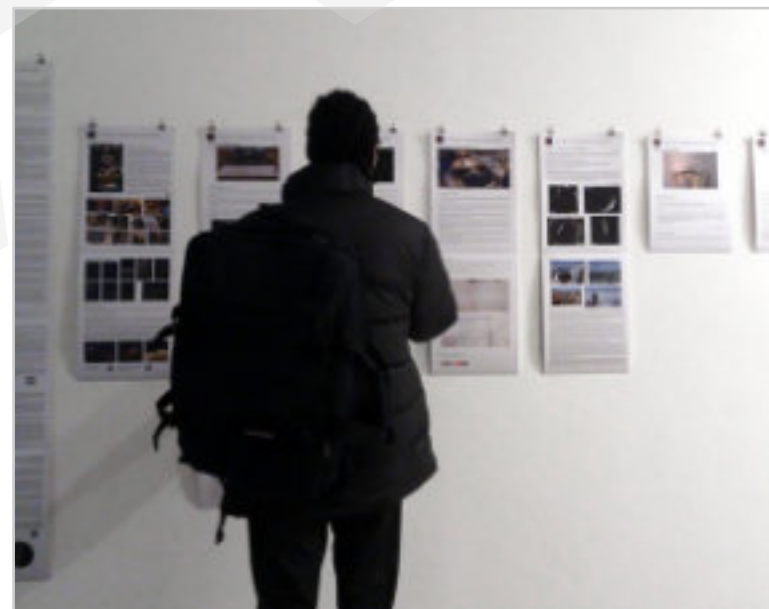
We have seen a huge amount of interest from the general public and have run some very successful social media campaigns via Facebook, Twitter and via our website. Our online meteor watch events have been hugely successful in generating public interest and we thoroughly enjoyed interacting with a global audience.

Science can be great fun!

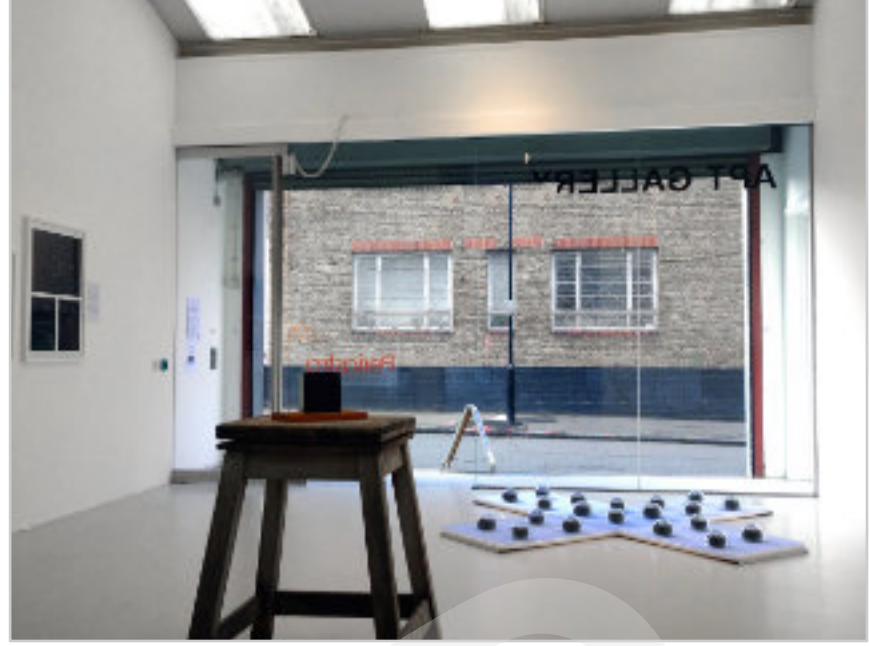
<https://ukmeteornetwork.co.uk>



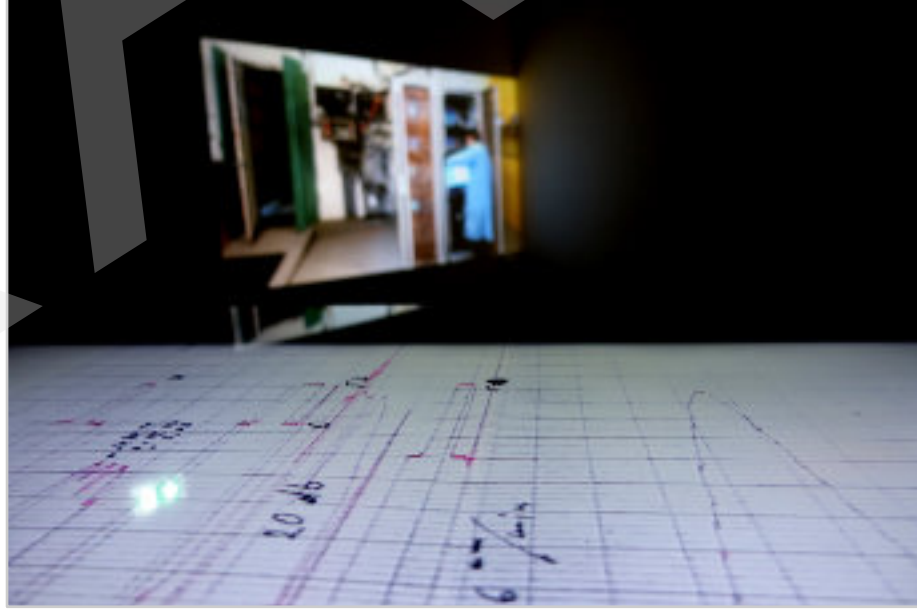
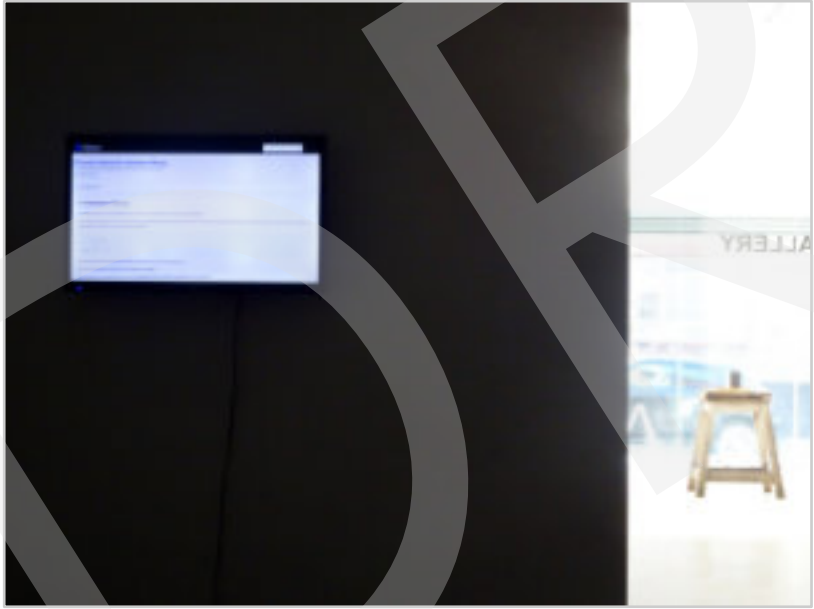
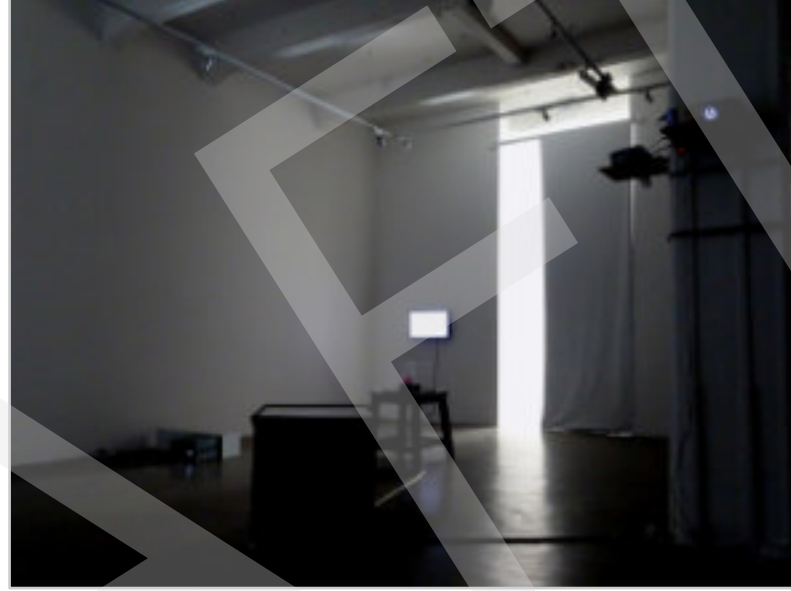
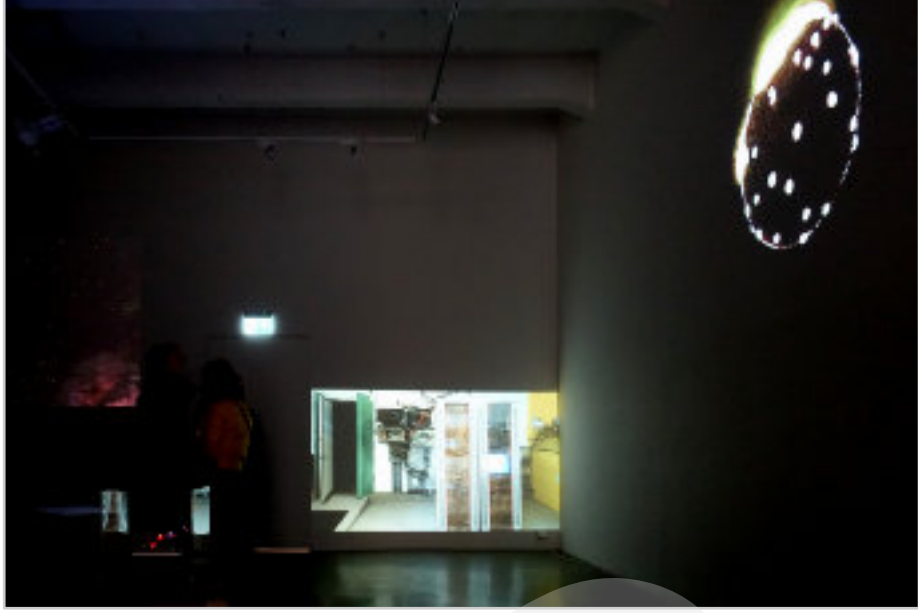
Meteor data from a single night, composed onto a single image



Private view



general views: front



general views: rear

Curator's Coda

Periastra almost never happened. Projects like this rely on what I call 'conceptual clapotis' . Waves can interfere either constructively or destructively and it is one of the roles of the curator to see and understand this process. By the end of 2021 the original concept had reached the end of its potential and I had to start afresh with another call to participants.

From previous exhibitions, I already knew of several artists working in art-science. I had then to send out to science projects which I thought may have a visual interest for the public. It proved difficult to convince established institutions of the intent of contemporary art. However, many of the small scale experimental projects were enthusiastic to take part.

The history of natural philosophy in the 20th and 21st Centuries could be categorised as the science of the 'field'. As such, the appreciation of mechanics in this process some would say has become subservient to models, theory and mathematics.

In this exhibition the overall ethic has been a return to the experimentation of the physical and its interaction

with the luminiferous. In this respect it is easy to see that this level of operation is common to both the processes of science and art and is where the distinctions dissolve.

It was notable also how many of those responding were attempting to measure or demonstrate the mercurial. Whether it was the fleeting appearance of meteors, a first flickering of electricity or various forms of the particulate. Discovery is the becoming of experiment; and with new paradigms become new technologies. The way this exhibition evolved pointed towards a neo-Copernican revolution in modes of thought for which art plays an invaluable role. As our participant Miles says:

"Failure to question is the ultimate scientific failure. Answers quit coming precisely when they aren't sought, and they aren't sought precisely when they are (erroneously) thought to be in hand. We are like the dog who discovers how to use the little flap-door and now considers himself master of the house. He lies in front of the fire and congratulates himself for his cleverness. He would be better outside chasing rabbits."

Paul Malone

Thanks to

The Curators would like to thank all those who took part in Periastra and to Art in Perpetuity Trust for the gallery and equipment support.

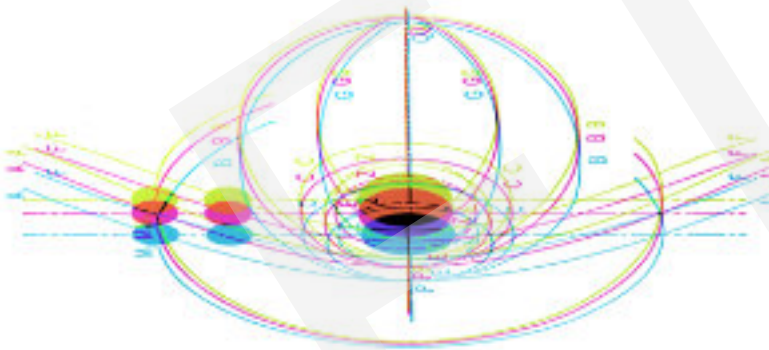
Special thanks also to those who donated to the exhibition.

UVC

UVC forced air sterilisation was used in this exhibition



Periastra as a Drive-thru exhibition



Information

All copyright on photographs taken in the exhibition by Paul Malone. Otherwise all copyright on the photographs and text on the participants pages by the participants themselves unless stated otherwise.

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