

School: Bath School of Fine Art

Researcher: Mariele Neudecker

Project Title: CERN

UOA: 32

300 Word Statement

Neudecker was invited to visit CERN as a guest artist with the Arts at CERN programme in 2015. Conducting interviews with 8 theoretical and experimental scientists, Neudecker established a focus for her inquiry into the means by which new scientific knowledge is constructed and interpreted and how that shapes our understanding of nature, matter and time.

Her research asks:

- 1. What is the capacity of our imagination and understanding of [im]materiality in scientific research, and how do we relate to the visible, often ignored and mundane circumstances of ground-breaking scientific knowledge?
- 2. How does the use of technology in Quantum Physics affect our perception of its digital representations, and how do we distinguish fact from fiction?
- 3. How do we visualize experimental and theoretical science that goes beyond human territories, nationalities, experience and comprehension?

Addressing the unperceivable extremes of scale at CERN, Neudecker took photographs and extensive video tracking-shots in various experiments, including A.L.I.C.E, one of four detectors in the Large Hadron Collider and the CLOUD experiment [Cosmics Leaving Outdoor Droplets], to develop 4 new key works: **Everything Happens Once** 2020, shown at *Broken Symmetries* in Tallinn, Estonia, 2020-2021, **I Can't Remember When It Started**, 2020, shown virtually at Galerie Barabra Thumm, Berlin, 2020, **Unusual But National Strategies I & 2** 2020, exhibited at *Centre of Gravity*, Bristol, 2020 and **A.L.I.C.E.**, commissioned for *Alice: Curiouser & Curiouser*, at the V&A, 2021. As part of the *Centre of Gravity* exhibition in Bristol, Neudecker chaired *Art & Science*, an online discussion panel, including CERN research physicist Jasper Kirkby.

Simultaneously objective and subjective, these works challenge our perceptions by tracking with a camera the mundane technological paraphernalia that masks the awe-inspiring nature of what is being analysed, which is persistently invisible and always in the past.

