

Graduation opportunity (DfI/IPD)

# Virtual Reconstruction of Color Field Paintings

Exploring the possibilities of reconstructing Color Field paintings through AR and VR technologies



The second half of the 20th century introduced a revolution in the art world with the development of synthetic pigments and paint media. This gave rise to movements like Color Field painting, where the visual

impact lies heavily on the vibrancy and purity of color. However, time has taken its toll, and many such paintings have lost their original luster due to material degradation — a fate evident in works like Frank Stella's "Effingham I (1967)."

The essence of Color Field paintings, particularly those utilizing fluorescent acrylics, is their specific color and surface effects. With ageing, these effects have diminished, leaving us with a mere shadow of

their former glory. Our goal is to counteract this visual loss and virtually restore these artworks to their original state, leveraging AR and VR technology to offer an immersive museum experience.

In this groundbreaking project you will explore interactions and design solutions enabling the virtual reconstruction of these iconic artworks. You will delve into the heart of Color Field paintings, examining how to translate the original (fluorescent) appearance into a digital format.

#### What You Will Do:

- Analyze provided detailed measurements of color, fluorescence, gloss, and texture.
- Explore AR and VR technologies to recreate the original visual effects of the artwork.
- Investigate the intersection of art restoration, digital technology, and viewer experience.

#### Who Can Apply:

- This assignment is open to students with a keen interest in art history, restoration, digital technologies, or any related field. We encourage applications from those who are eager to contribute to the preservation of our cultural heritage through innovative means.

Client: Stefanie De Winter (post-doc researcher in art history, University of Leuven)

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