

VUB spinoff Universum Digitalis performs digital image processing for the Louvre Museum to document the restoration of Jan Van Eyck's Virgin of Chancellor Rolin

Universum Digitalis, a spinoff company of the Vrije Universiteit Brussel, is renowned for its expertise in ultra-high-resolution image processing. Founded in 2008 by Prof. Dr. Frederik Temmermans and Dr. Ir. Iris Vanhamel, the company has a rich history of collaborations with prominent cultural heritage institutions across Europe. One such example is its latest collaboration with the Louvre Museum in Paris.

In November 2021, the *Musée du Louvre* launched a conservation and restoration project for Jan Van Eyck's masterpiece, the Virgin of Chancellor Rolin. The project was conducted at the laboratories of the *Centre de Recherches et de Restauration des musées de France* in Paris (C2RMF), with the entire campaign completed in December 2023.

After the treatment, the Royal Institute for Cultural Heritage documented both sides of the painting with hundreds of macro photography photos. Universum Digitalis then algorithmically assembled those images to produce gigapixel images of the artwork. The painting was previously digitized in 2015 using the same scientific protocol. Leveraging their expertise, Universum Digitalis seamlessly aligned both acquisitions, enabling a unique pixel-level comparison before and after restoration.





Comparison of the front and backside before and after restoration.

The restored painting will be exhibited at The Louvre Museum during the exhibition "Revoir Van Eyck – La Vierge du chancelier Rolin" from March 20th to June 17th, 2024. In parallel with the exhibition's opening, the gigapixel images produced by Universum Digitalis will be made publicly accessible on the Closer to Van Eyck website.²

Universum Digitalis continues to contribute to the preservation of cultural heritage, having worked with institutions such as the Jheronimus Bosch Art Center in 's-Hertogenbosch, Kunsthistorisches Museum Wien in Vienna, Lobkowicz Collections in Prague, Musée du Louvre in Paris, Musea Brugge in Bruges, Oskar Reinhart Collection in Winterthur, and the Royal Institute for Cultural Heritage in Brussels.

- 1. https://www.louvre.fr/en/what-s-on/exhibitions/a-new-look-at-jan-van-eyck
- 2. https://closertovaneyck.be