



Discovery Communications

## Secret Painting in Rembrandt Masterpiece Seen

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Scientists may be one step closer to revealing a hidden portrait behind a 380-year-old Rembrandt painting.

The masterpiece, "Old Man in Military Costume" by Dutch painter Rembrandt Harmenszoon van Rijn, resides at the J. Paul Getty Museum in Los Angeles. Scientists had noticed the painting bears faint traces of another portrait beneath its surface. Researchers had previously probed the painting with infrared, neutron and conventional X-ray methods, but could not see the behind the top coat, largely because Rembrandt used the same paint (with the same chemical composition) for the underpainting and the final version. New studies with more sophisticated X-ray techniques that can parse through the painting's layers give art historians hope that they may finally get to see who is depicted in the secret image.



Mock-up of Rembrandt's "An old man in military costume" with a portrait painted underneath the final work.

"Our experiments demonstrate a possibility of how to reveal much of the hidden picture," Matthias Alfeld from the University of Antwerp said in a statement. "Compared to other techniques, the X-ray investigation we tested is currently the best method to look underneath the original painting."

Alfeld and an international team used macro X-ray fluorescence analysis to examine a mock-up of Rembrandt's original, created by museum intern Andrea Sartorius, who used paints with the same chemical composition as those used by the Dutch master. Sartorius painted one portrait on the canvas and then an imitation of "Old Man in Military Costume" on top.