

## Kadriorg Art Museum's 5th Annual Spring Conference, 13.-14. May 2011

### Title of presentation

*Hidden layers of paintings - ways to visualize the invisible*

### Abstract

The examination and analysis of paintings include a number of imaging techniques such as X-radiography or infrared reflectography (IRR) to determine the structure, the painting techniques and the deterioration of the artworks. Many of the imaging techniques reveal information that is not visible with our naked eye and the interpretation of various phenomena is often dependent on a thorough understanding of observations and correlations with other analytical results. Thus, it is an advantage to be able to superimpose and visualize phenomena in the different layers in order to understand and interpret the structural composition and deterioration. This presentation will explain the techniques behind and give examples of how to visualize the relation between the different layers of hidden information and its relation to the visible parts of the paintings, for example the correspondence between the underdrawing and the final paint layer of a painting. Techniques such as creating animations to visualize the gradual change from one layer to another provide an aid in technical art history research as well as a means of disseminating the layered structure - including the concealed parts of a painting - to the interested museum public.

**Mikkel Scharff** is head of the paintings conservation department at the Royal Danish Academy of Fine Arts, the School of Conservation. His research and teaching areas include canvas painting deterioration and conservation techniques, history of paintings conservation, imaging techniques and technical art history spanning from antique and medieval polychromy, over more recent painting techniques to contemporary art.