

Wall Painting Investigation by Means of Non-invasive Terahertz Time-Domain Imaging (THz-TDI): Inspection of Subsurface Structures Buried in Historical Plasters - DTU Orbit (08/11/2017)

Wall Painting Investigation by Means of Non-invasive Terahertz Time-Domain Imaging (THz-TDI): Inspection of Subsurface Structures Buried in Historical Plasters

Characterization of subsurface features of wall paintings is important in conservation and technical art history as well as in building archaeology and architecture fields. In this study, an area of the apsidal wall painting of Nebbelunde Church (Rødby, Denmark) has been investigated by means of terahertz time-domain imaging (THz-TDI). Subsurface structures have been detected at different depths inside the lime-based plaster of the wall painting until approximately 1 cm from the surface. The surface morphology of the buried structures has been 3D imaged in detail, providing a substantial contribution in their characterization.

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