

# **Application of computed tomography in cultural heritage conservation: a summary of case studies and experiences**

M.Bettuzzi, F.Casali, M.P.Morigi, R.Brancaccio, A.Berdondini, V.D'Errico

Department of Physics of the University of Bologna

## **Abstract**

X-ray Computed Tomography (CT) is a complex technology. It is well known in medicine, but it hasn't yet shown its full potential in cultural heritage conservation. The researchers at the Department of Physics, University of Bologna, have developed, over a couple of decades, expertise in non-standard systems for X-ray CT and they worked to use this know-how in the investigation of valuable works of art. Two main goals have been reached in recent years: to allow conservators to investigate, by means of this powerful methodology, a class of objects previously excluded, and to bring the CT instrumentation inside museums and restoration centers. Our experience in development of CT systems for diagnostics of cultural heritage will be reported and a number of case studies will be presented.