# Crowd funded Research: Low-cost Multispectral Imaging

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**BLOG** 

CHSOPENSOURCE.ORG

Scientific Examination for works of art

Puglia, Italy

Cologne, Düsseldorf, Frankfurt, Geneva, Londo Malta, Munich, Nuremberg, Paris, Prague, Tel antoninocose@gmail.com



CHSOS develops affordable methodologies for Art examination serving the Art Conservation community

#### Learn these methods

### PUBLICATIONS

A practical guide to Panoramic Multispectral Imaging

Practical notes on ultraviolet technical photography for art examination

Multispectral Imaging of Pigments with a digital camera and 12 interferential filters

Panoramic infrared Reflectography.
Technical Recommendations

FORS spectral database of historical pigments in different binders

Macro Photography for Reflectance Transformation Imaging: A Practical Guide to the Highlights Method



1<sup>st</sup> day. Technical Photography
2<sup>nd</sup> day. Infrared Reflectography
Reflectance Spectroscopy, RTI
3<sup>rd</sup> day. Multispectral Imaging

Cultural Heritage Science Open Source
Chsopensource.org



## Crowd-funding

CHSOS has develop a low-cost multispectral imaging system for art and archaeology realized thanks to the first ever crowdfunding project in art conservation science. Micro funding came from art conservation professionals.

# Low-Cost Multispectral Imaging

- A full spectrum (360-1100 nm) digital camera.
- A set of 18 bandpass filters for historical pigments identification.
- Our new on-scene reflectance standards.
- Raw Images splitting and calibration with free software

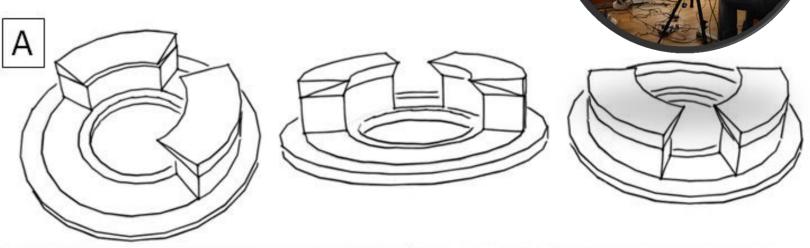
#### Tested on Pigments Checker: 54 historical pigments



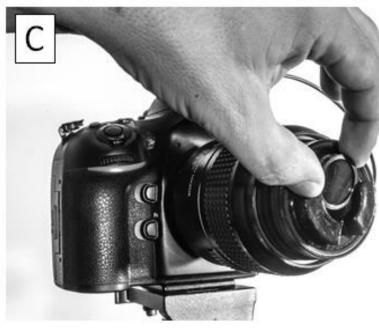
III International
Meeting on
Retouching of
Cultural Heritage
Porto (Portugal)
23-24/10/2015



mapping pigments segmenting inpaints enhance faded documents







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