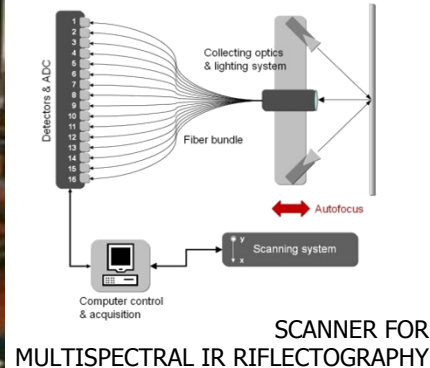


RESEARCH ACTIVITY

- Development of instruments for the non-invasive diagnostics of artworks.
- Among them, the *Scanning device for InfraRed Reflectography (SMIRR)* allows the visualization of details hidden by the painting layer, such as the underdrawing or pentimenti, thanks to the transparence property of most pigments to IR radiation.
- The resultant data are very precious in order to extract information either on the various phases of painting manufacturing or on the state of preservation of the work of art.



RESULTS

Compared to the traditional IR reflectography, generally performed in a single spectral band from 900nm to 1700nm, the multispectral modality (16 spectral bands, spectral resolution ranging from 50nm to 100nm) together with the shift of the upper spectral limit up to 2300 nm, allow the choice of the most effective NIR bands and improves the ability to detect hidden features, increasing image contrast and highlighting regions of the paint layer with different transparency characteristics.



CARAVAGGIO, CENA IN EMMAUS, BRERA, MILANO



Ch @1300 nm - Ch @952 nm

APPLICATIONS

- *Caravaggio*, Cena in Emmaus
Pinacoteca di Brera, Milano
- *Leonardo da Vinci*, La Scapigliata
Galleria Nazionale di Parma
- *Raffaello*, Madonna del Granduca
Galleria Palatina, Firenze
- *Sebastiano del Piombo*, Madonna del velo
Museo di Capodimonte, Napoli
- *Cimabue*, Madonna con bambino
Museo di Santa Verdiana, Castelfiorentino
- *Edvard Munch*, Angoscia
Munch Museum, Oslo

RESEARCH GROUP

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