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**A17-DISCOVERY OF REGIONAL POTENTIAL  
CONSERVATION AND RESTORATION OF ARTISTIC  
HERITAGE THROUGH NEW TECHNOLOGIES**

A.S. 2018/2019

SCUOLA MEDIA «ANDREA VELLETRANO»  
Velletri



# ARTICLE 9 OF THE ITALIAN CONSTITUTION



THE MAIN LAW THAT REGULATES CULTURAL HERITAGE (TANGIBLE, INTANGIBLE, MOBILE, IMMOVABLE AND LANDSCAPE ASSETS) IS ARTICLE 9 OF THE ITALIAN CONSTITUTION.

IT SAYS: "THE REPUBLIC PROMOTES THE DEVELOPMENT OF CULTURE AND SCIENTIFIC AND TECHNICAL RESEARCH. IT PROTECTS THE LANDSCAPE AND THE HISTORICAL AND ARTISTIC HERITAGE OF THE NATION."

# CONSERVATION OF ARTISTIC ARTEFACTS

CONSERVATION IS THE WAY TO PRESERVE ARTISTIC ARTEFACTS WITHOUT ALTERING OR DAMAGING THEM, TO PASS THEM ON TO FUTURE GENERATIONS. SOME RECENT TECHNOLOGICAL INNOVATIONS HAVE MADE THIS PROCESS SIMPLER AND MORE PRECISE. FOR EXAMPLE, UNTIL A FEW YEARS AGO, RESTORERS USED A CHEMICAL RESIN, CALLED PARALOID B72, TO PRESERVE PAINTINGS, WHICH TURNED YELLOW AFTER A WHILE. NOW THE RESIN HAS BEEN REPLACED BY NON-DESTRUCTIVE TECHNIQUES.

# RESTORATION OF ARTISTIC ARTEFACTS

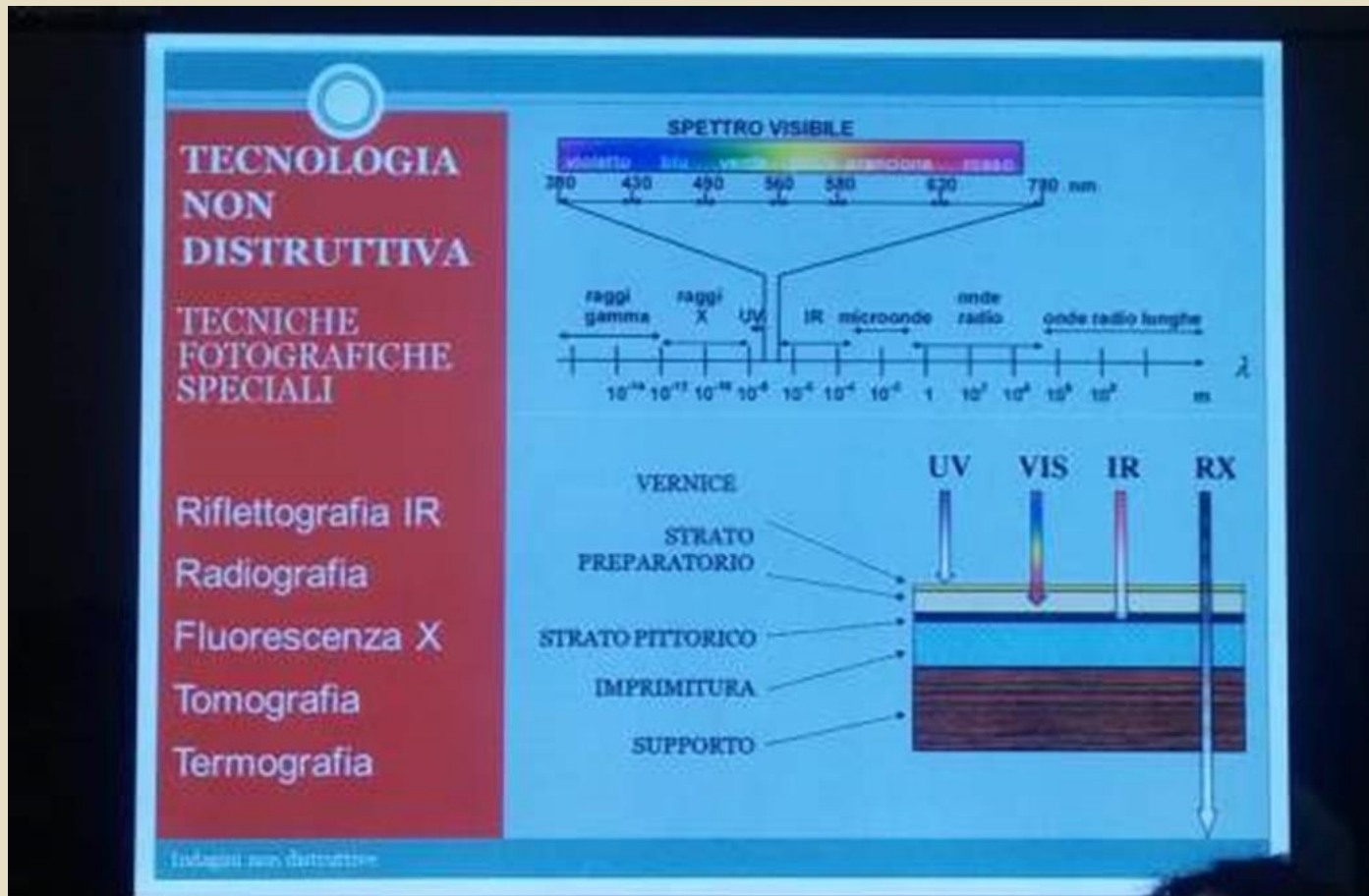
RESTORATION IS THE TECHNICAL  
OPERATION AIMED AT REINSTATING THE  
PARTICULAR COMPROMISES OR  
DETERIORATIONS OF A WORK OF ART.

THIS PROCESS HAS CRITERIA:

- 1) MINIMUM INTERVENTION
- 2) RECOGNITION
- 3) REVERSIBILITY
- 4) COMPATIBILITY
- 5) INTERDISCIPLINARITY

# DIAGNOSTIC INVESTIGATIONS OF PAINTINGS

FOR THE DIAGNOSTIC INVESTIGATIONS OF PAINTINGS IT IS POSSIBLE TO USE NO MORE INVASIVE TECHNIQUES LIKE THOSE USED IN THE PAST. THESE SPECIAL PHOTOGRAPHIC TECHNIQUES, SUCH AS IR REFLECTOGRAPHY, X-RAY FLUORESCENCE, RADIOGRAPHY, MAKE IT POSSIBLE TO "READ" THE LAYERS UNDERLYING THE SURFACE OF A PAINTING, WITHOUT DAMAGING IT.



2004 – AUGUSTO LORICATO – Musei Vaticani



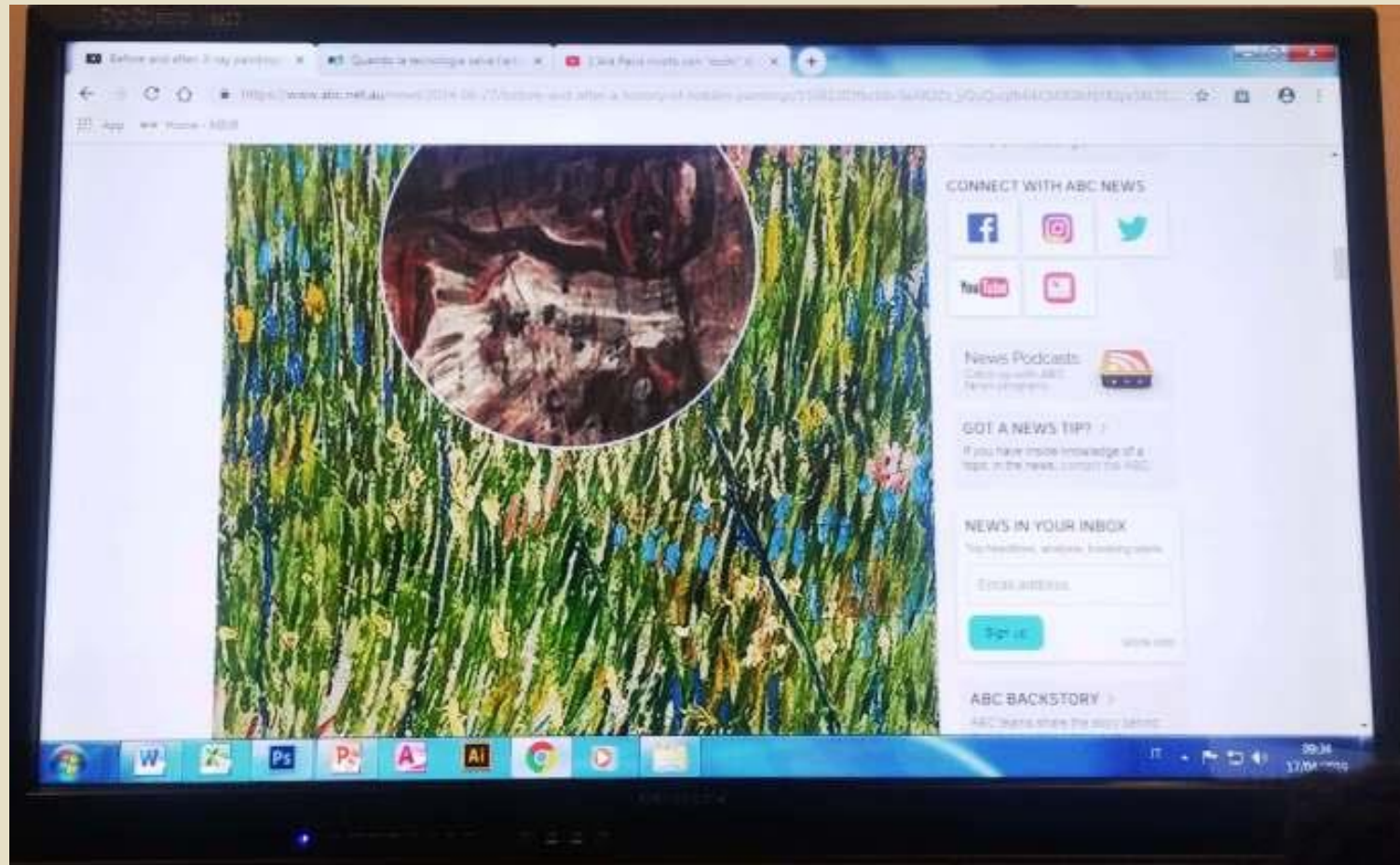
# RESTORATION OF ARTISTIC ARTEFACTS

THESE CRITERIA HELP, FOR EXAMPLE, TO UNDERSTAND THE AUTHENTICITY OF A WORK OF ART, GOING BACK TO THE HISTORICAL PERIOD IN WHICH IT WAS CREATED, IDENTIFYING THE INGREDIENTS USED TO MAKE COLOURS FOR THE PAINTINGS, OR TO IDENTIFY THE ORIGIN OF A CANVAS, FOR EXAMPLE BASED ON ITS MANUFACTURE.

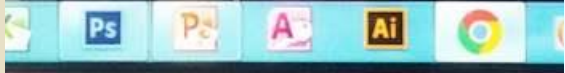
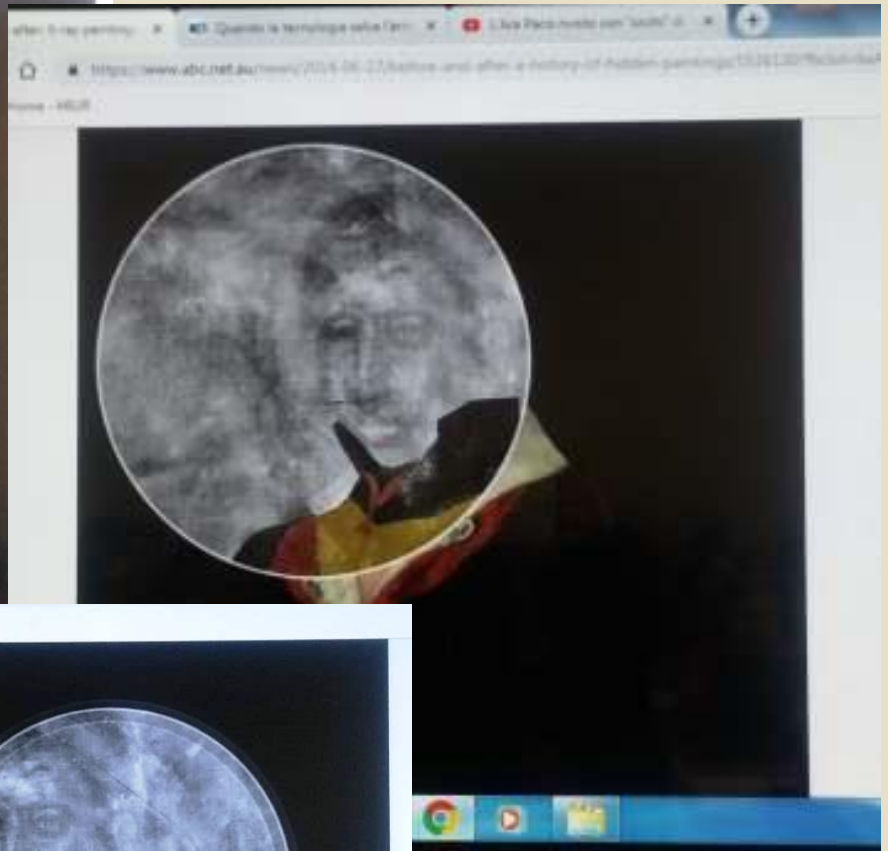
## GRAZING LIGHT PHOTOGRAPHY



# ...OR TO UNDERSTAND IF THE ARTISTS REWORKED WORKS EXECUTED PREVIOUSLY







# IR REFLECTOGRAPHY



THE PAINTER USED A DIFFERENT MIXTURE TO CREATE COLOUR BLUE.

**A TREAT**  
FOR COLOUR  
BLUE WE CAN GO  
BACK TO A RICH  
CLIENT, IF THE  
ARTIST USED  
POWDER  
OBTAINED FROM  
LAPIS LAZULI,  
SINCE THIS STONE  
COMES FROM THE  
EASTERN  
COUNTRIES.

ON THE OTHER  
HAND, IF FOR A  
PAINTING, OIL  
COLOURS WERE  
USED, THE WORK  
WAS DONE IN A  
RECENT TIME,  
AND THEREFORE  
IT COULD BE A  
REPRODUCTION  
BY FORGERS.

# RADIOGRAPHY

L'indagine radiografica è fondamentale per conoscere lo stato di conservazione dell'opera, la tecnica di esecuzione. È molto utile su tavole dipinte, in quanto fornisce informazioni sul supporto:

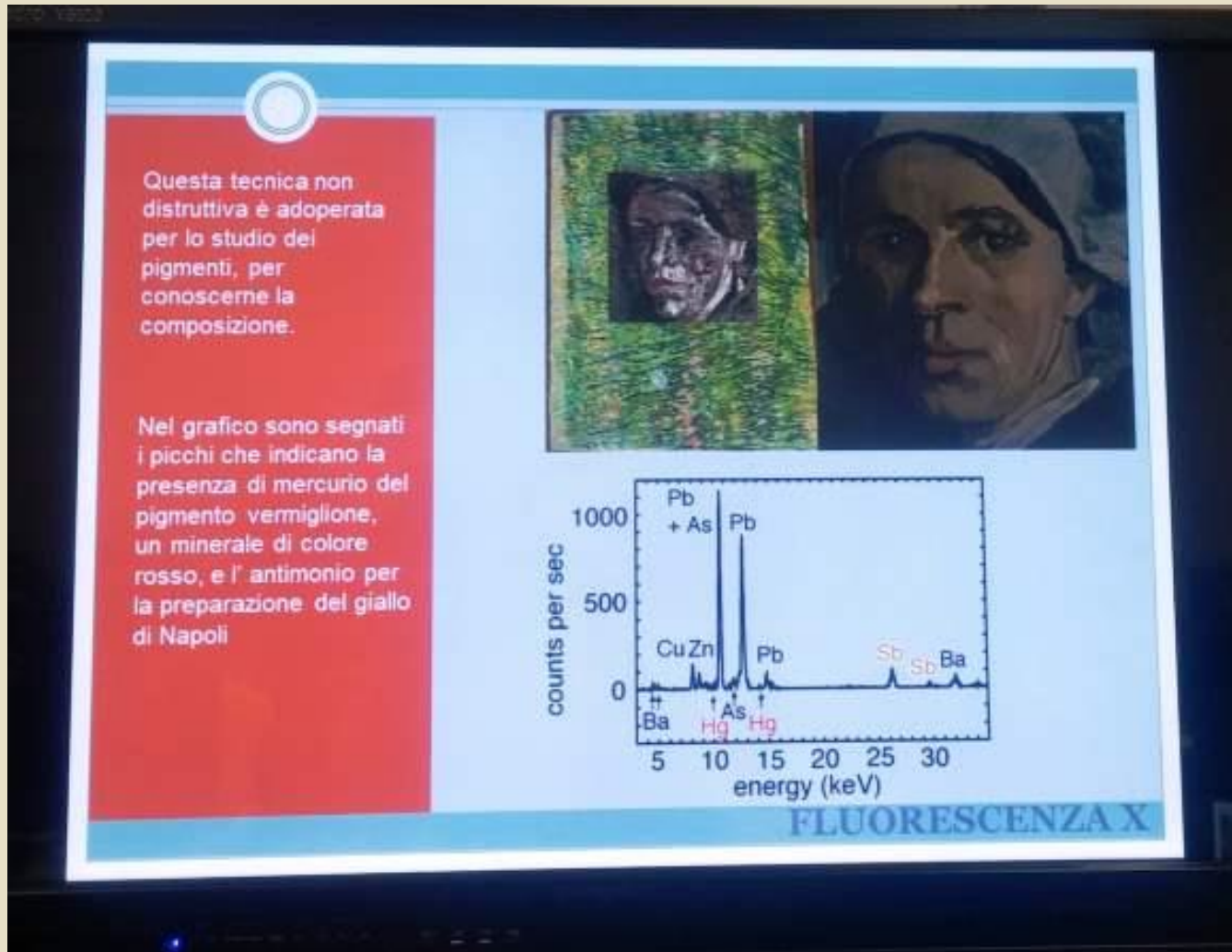
- . Tipologia
- . Assemblaggio
- . Monomissioni



RADIOGRAFIA

# X-RAY FLUORESCENCE

THIS TECHNIQUE IS USED TO KNOW THE COMPOSITION OF PIGMENTS





<http://www.moma.org>.

THANKS TO TECHNOLOGY A PAINTING BY MONET WAS REPRODUCED FROM SCRATCH, THAT IS THE FIRST ISSUE OF THE SERIES OF *WATERLILIES* PAINTED BY HIM, WHICH SUFFERED SERIOUS DAMAGE DUE TO A FIRE AT THE *MOMA* GALLERY IN NEW YORK. BY MEANS OF PRECISE SOFTWARE, COLOURS AND SHAPES HAVE BEEN REPRODUCED TO CREATE A FAITHFUL REPRODUCTION OF THE PICTURE.

# APP E BENI CULTURALI

I MIBAC TOP 40 - LA CULTURA A PORTATA DI  
DITA

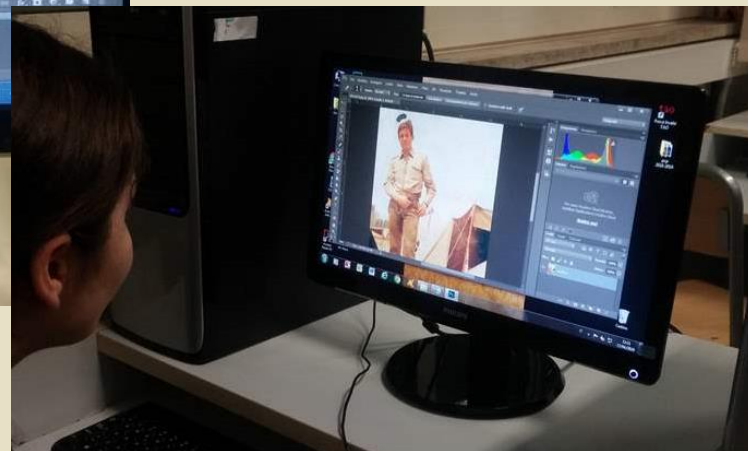
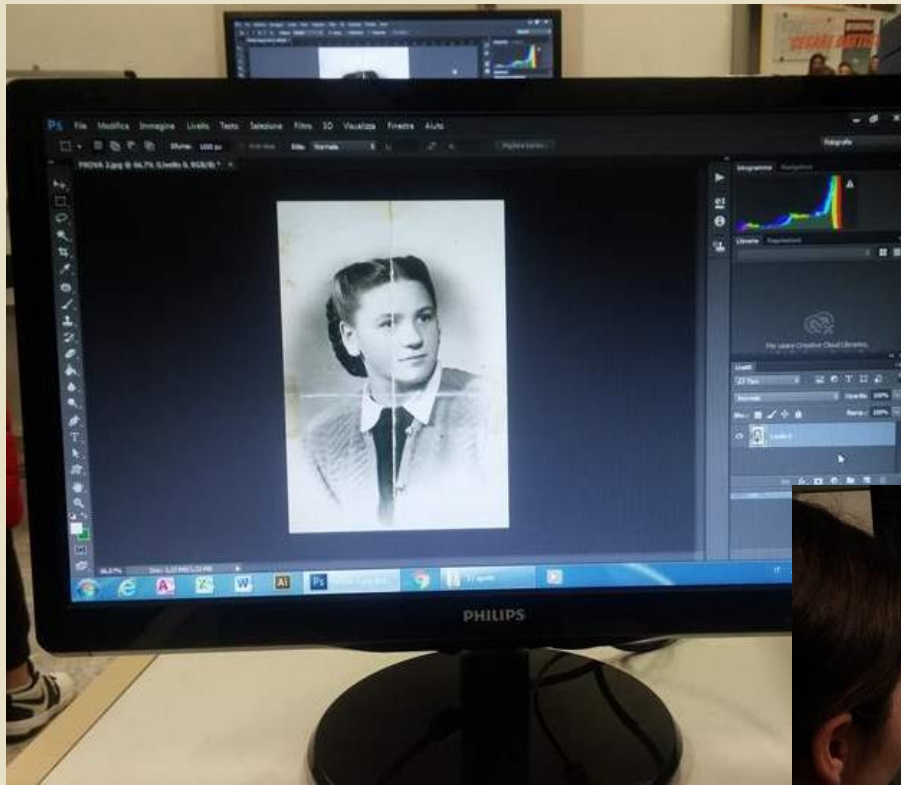
VIAGGIART - LA GUIDA TURISTICA D'ITALIA

MIC ROMA - MUSEI CIVICI DI ROMA

THE MIBACT (ITALIAN MINISTRY FOR ENVIRONMENTAL AND CULTURAL HERITAGE AND TOURISM) HAS CREATED AN APP FOR SMARTPHONES TO MAKE ITALIAN HERITAGE MORE ACCESSIBLE, EVEN TO YOUNG GENERATIONS

# SOLUZIONI POSSIBILI PER IL RESTAURO

USING THE PHOTOSHOP PROGRAM TO TRY TO MODIFY OLD RUINED PHOTOS, YOU CAN UNDERSTAND THE POTENTIAL OF SOFTWARE IN THE RESTORATION OF WORKS OF ART.

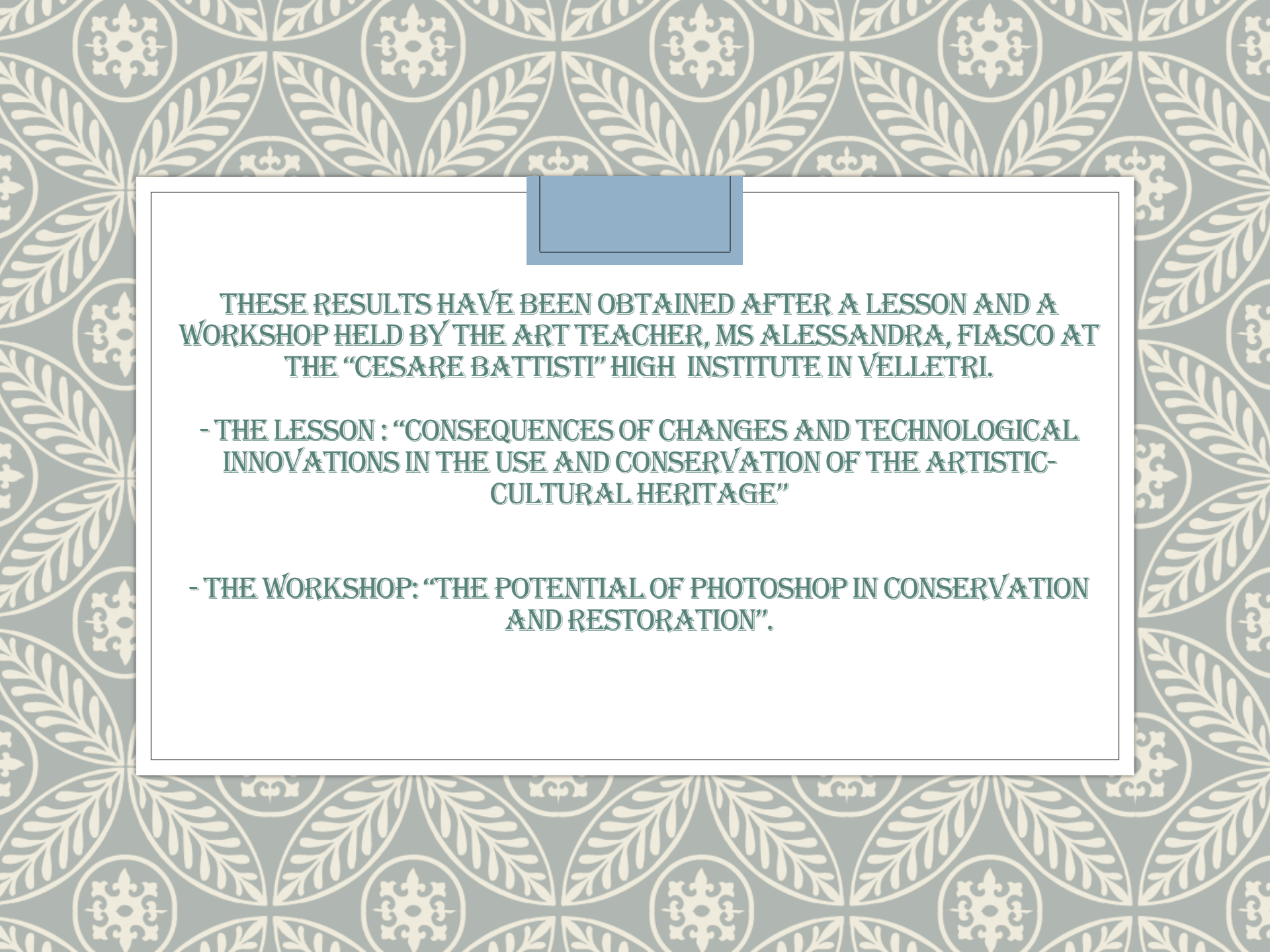




**Graphics Laboratory at the "Cesare Battisti"  
High Institute, Velletri**







THESE RESULTS HAVE BEEN OBTAINED AFTER A LESSON AND A WORKSHOP HELD BY THE ART TEACHER, MS ALESSANDRA, FIASCO AT THE "CESARE BATTISTI" HIGH INSTITUTE IN VELLETRI.

- THE LESSON : "CONSEQUENCES OF CHANGES AND TECHNOLOGICAL INNOVATIONS IN THE USE AND CONSERVATION OF THE ARTISTIC-CULTURAL HERITAGE"

- THE WORKSHOP: "THE POTENTIAL OF PHOTOSHOP IN CONSERVATION AND RESTORATION".

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