## XLIII National Congress of the Italian Society for the History of Physics and Astronomy



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## The first astronomical observations trough the photographs collected in Inaf-Oar archive. Study to support conservative recovery.

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The first astronomical images, preserved at Inaf-Oar archive, are three daguerreotypes taken by Angelo Secchi in 1851 to the Colleggio Romano Observatory, on the occasion of the total solar eclipse. During the same eclipse, at the Royal Observatory of Koenigsberg in Prussia, Julius Berkowski obtained the first daguerreotype of the totality.

Afterward, in 1857, Angelo Secchi undertook to photograph the different phases of the Moon, obtained with the Collegio Romano Merz equatorial telescope. They used collodion glass plate negatives printed on albumen paper.

The *Fasi lunari* photographs represent the first photographic atlas of the Moon, presented on 28th August 1858 to the 'Parisian Academie des Sciences', and then to the London Observatory of Greenwich.

In 1860, Angelo Secchi observed the solar eclipse, during an expedition in Las Palmas de Gran Canaria. During the eclipse, he found three solar prominences and it was the first proof of their existence. The image of the totality of the solar eclipse was fundamental to prove that the corona belongs to the sun rather than to the moon.

These photographs, salted papers, albumen prints, daguerrotypes, collodion glass plate negatives, are the first historical photographic technique, as well as among the first astronomical observations through photography. Historical study and diagnostic analyses of these photographs, to characterize the nature of the compounds and the state of degradation, will enrich knowledge in both historical and scientific fields, and it will support the future restoration, that it will take place according to some collaboration with Universities, teaching on conservation.

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