Paper ID: 90984
student

58th IAA HISTORY OF ASTRONAUTICS SYMPOSIUM (E4)
History of Italian Contribution to Astronautics (3)

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ITALIANS IN EXILE: THE LEGACY OF ASTRONOMERS ANGELO SECCHI, BENEDICT SESTINI, AND THE GEORGETOWN OBSERVATORY

Abstract

The Revolutions of 1848 inspired people across Europe and in Italy to abandon venerable monarchic rule in favor of liberal institutions. These revolutionaries viewed the Jesuits as instruments of the monarchy, and drove them out of Italy. In July of 1848, Jesuit astronomers Angelo Secchi and Benedict Sestini took refuge from the political pressures at a budding Jesuit observatory in the heart of America's capital, Washington, D.C. This observatory was Georgetown University's Observatory, the second fixed observatory in North America. It was the first and only Jesuit observatory in the world, and it had just been founded in 1841.

The discoveries made by both Secchi and Sestini during their time at the Georgetown Observatory resulted in fundamental changes in the field of astronomy, through work on sunspots, spectroscopy, and mathematics. Angelo Secchi returned to Italy after a year at Georgetown and went on to study double stars, solar events, and pioneer spectroscopy. He was soon considered the 'father of astrophysics,' and his research spanned heliophysics, spectroscopy, meteorology, geomagnetism, geodesy, mathematics, electricity, and inventing the heliospectrograph, star spectrograph, and telespectroscope. Benedict Sestini remained in DC and continued to study sunspots, star colors, mathematics and astronomy, influencing future generations of astronomers and scientists at the Georgetown Observatory.

Drawing on primary sources from the archives of Georgetown University – including artifacts such as telescopes and spectroscopes used by Secchi, Sestini, and other astronomers in the Observatory – this paper examines the influence of the Observatory's Jesuit astronomers on the development of modern astronomy.

This paper makes three arguments: 1) the specific historical events surrounding the Revolution of 1848 led Jesuit astronomers Secchi and Sestini to Georgetown University; 2) the research conducted by Secchi and Sestini at Georgetown Observatory incited their later work and publications; 3) the discoveries made by Secchi and Sestini over their careers influenced the development of the modern field of astronomy and astrophysics.