

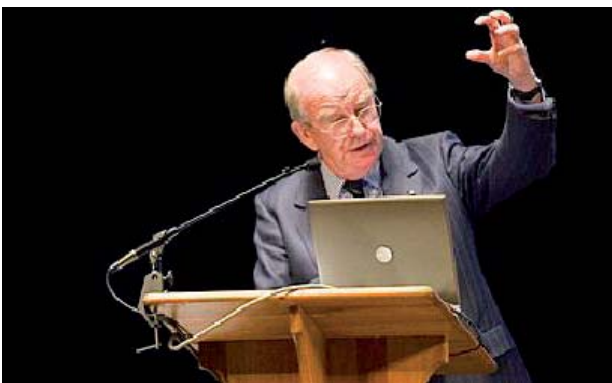


**Giuseppe Pelosi**  
Department of Information Engineering  
University of Florence  
Via di S. Marta, 3, 50139 Florence, Italy  
E-mail: giuseppe.pelosi@unifi.it

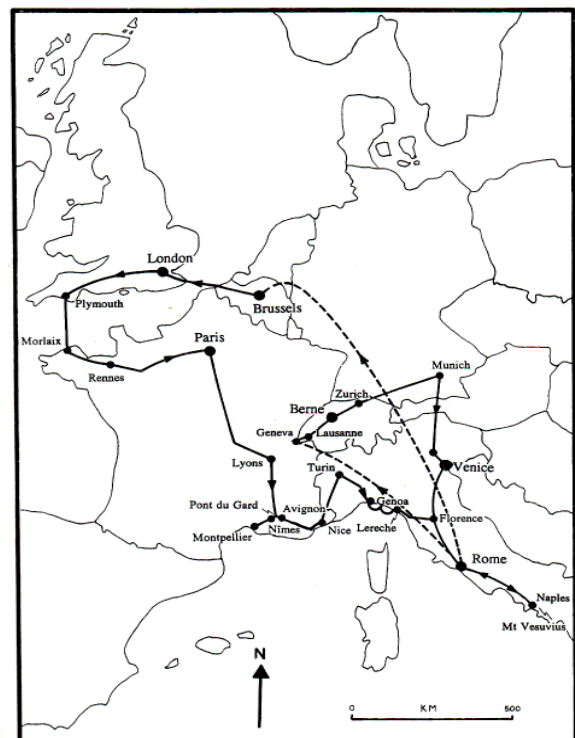
### Foreword

On September 13, 2017, Sir John Meurig Thomas held a lecture in Florence [1]. Thomas, now retired, held the Chair of Chemistry at the Royal Institution, which was created for Michael Faraday. Thomas is renowned for his excellent book *Michael Faraday and the Royal Institution: The Genius of Man and Place* (Institute of Physics Publishing, 1991). The book was translated in 2006 in Italian as *Michael Faraday La storia romantica di un genio* (Firenze University Press) by Luigi Dei, now Rector of the University of Florence, and has been released to the public domain on the occasion of this lecture of September 13 (Figure 1).

In the book, it is recalled that from February 21, 1814, to April 7, 1814, Sir Humphry Davy [Penzance, UK, December 17, 1778 - Geneva, CH, May 29, 1829] on the occasion of his continental tour (Figure 2), took Faraday to Florence, where they visited the local museum and saw Galileo's first telescope (Figure 2). In Florence, Davy conducted experiments on the combustion of diamond in oxygen, using the Great Duke great burning glass. As



**Figure 1.** Sir John Meurig Thomas, giving his lecture in Florence in September 2017.



**Figure 2a.** The continental tour of Davy and Faraday (1813-1815).

Faraday remembered, "After several attempts Sir H. Davy observed the diamond to burn visibly, and when removed from the focus it was found to be in a state of active and rapid combustion. The diamond glowed brilliantly with a scarlet light inclining to purple, and when placed in the dark continued to burn for about four minutes. As Faraday observed, it was "a phenomenon never observed before." In a letter to his mother, he added "Florence, too, was not destitute of its attractions for me, and in the Accademy del Cimento and the Museum attached to it is contained an inexhaustible fund of entertainment and improvement."



**Figure 2b.** The monumental “Galileo Tribune” (decorated in 1841) at the “Specola” Museum of Florence, where the Scientific Assemblies in Florence used to take place.

I hence sought for further investigations on later connections between Michael Faraday and Italy, and Florence, in particular. In the following, two short papers are published. The first paper is on a minor figure in Italian physics who claimed priority over Faraday’s discovery of magnetic induction: Francesco Zantedeschi. The second paper is on the most preeminent physicist in Italy at the time, and the greatest instrumentation builder, Leopoldo Nobili. He was closely connected with Faraday, again concerning magnetic induction, since it was thanks to his “astatic galvanometer” that Faraday managed to prove the phenomenon of magnetic induction.

## Reference

1. <http://www.fupress.com/contenuti/the-character-legacy-and-genius-of-michael-faraday---lecture-by-sir-thomas-meurig/740>