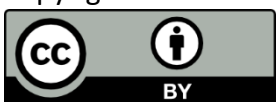
[Global Histories]
A student journal

Review: HistorY and Physics Experience (HYPE) – Nuclear Physics and History, Bologna Italy, May 2018

Author: Alexandra Holmes

DOI: http://dx.doi.org/10.17169/GHSJ.2018.272

Source: Global Histories, Vol. 4, No. 2 (Oct. 2018), pp. 201-203
ISSN: 2366-780X



Publisher information:
'Global Histories: A Student Journal' is an open-access bi-annual journal founded in 2015 by students of the M.A. program Global History at Freie Universität Berlin and Humboldt-Universität zu Berlin. 'Global Histories' is published by an editorial board of Global History students in association with the Freie Universität Berlin.

Freie Universität Berlin
Global Histories: A Student Journal
Friedrich-Meinecke-Institut
Koserstraße 20
14195 Berlin

Contact information:
For more information, please consult our website www.globalhistories.com or contact the editor at: admin@globalhistories.com.

HistorY and Physics Experience (HYPE)—Nuclear Physics and History

Bologna, May 2018

REVIEWED BY ALEXANDRA HOLMES

Although the International Students of History Association (ISHA) run many seminars and workshops across Europe each year, HYPE was billed as a new experimental inter-disciplinary collaboration between ISHA and the Italian Association of Physics Students (IAPS). Despite being from very different academic schools of thought, what could we learn from each other, and how could we productively engage across the science-humanities divide to enrich our own practices and knowledge bases?

The workshop, held between May 25th and 27th, 2018, opened on the Friday evening with two insightful talks crossing the history-physics divide. Opened by Prof. Ciferelli, Former President of the European Physical Society (EPS) and current President of the Italian Physical Society (SIF) and the Centro Fermi, and currently working with the ALICE collaboration at CERN, it was stimulating to have such a globally renowned academic giving her thoughts on the development of physics. Also, given the recent controversial comments by Professor Strumia of Pisa on sexism,[1] it was encouraging that the workshop was opened by such a notable woman, albeit the only female speaker over the weekend. Her keynote speech was followed by Prof. Pancaldi, Professor of the History of Science and Technology at Bologna, discussing the impact of Alessandro Volta as a historical figure and important physicist in the field of electricity, demonstrating how the two disciplines can intertwine productively.

The talks were followed by a dinner where participants could mingle and network, followed by a historical tour of Bologna cite centre given by a history student participant, where we also got to sample some of the delicious food and ice cream that Italy, and specifically Bologna, are so famous for. It was good to get to know some of the physics participants in advance of the workshops, especially as we all shared a room with one other fellow student.

On Saturday, the day began with the first set of two workshops. I participated in the "old sciences" roundtable, where historians and physicists discussed the lineage of physics—when can we begin to consider sciences as a separate subject from humanities, and how did historical figures conceptualise physics within and without the container of "natural science"? This naturally led on to the changing role religion has played within fields of learning, being both a source of inspiration in the search for knowledge, and sometimes a political hurdle for the dis-

[1] Sophia Chen, "Physicists Condemn Sexism through 'Particles for Justice,'" *Wired*, October 5, 2018, https://www.wired.com/story/physicists-condemn-sexism-through-particles-for-justice/.

semination of that knowledge. This led to an insightful and intelligent discussion, where people from both disciplines could usefully bring their own fields into play and both sides could learn from the other.

After a leisurely buffet lunch in the sunshine, the second set of panels began in the afternoon. I attended the workshop on pedagogy, where attendees brought both disciplinary expertise and personal experience to the table. It was enlightening to hear how people ended up choosing their disciplines and looking for connecting features as to why they had not taken other paths, including either history or physics. The role of individual teachers, either inspiring or off-putting, seemed for many to be key reasons why we ended up in our respective disciplines—while this is not exactly a new discovery, it can also often be overlooked when considering pedagogic methodology. Discussions were held on how to improve teaching methods for those who found, for example, maths difficult and therefore left the field of science early; or vice versa for humanities. The impact of different education systems were also compared, as well as the scope for teaching and learning globally, and the rise of new forms of outreach through online platforms such as Massive Online Open Courses were debated.

The end of the workshop was heralded by two final lectures which brought together many of the strands of discussion which had arisen during the day. We were honoured again by the calibre of the speakers who had agreed to talk to us. Prof. Maiani, former Director-General of CERN, is one of the most important particle physicists in the world, and discussed in some ways his own history, and how the world of fundamental physics has changed since his career began—a micro-history which encapsulates world-changing discoveries. Prof. Zoccoli, current Vice-President of the Italian National Institute of Nuclear Physics, and also working currently with the ATLAS collaboration with CERN similarly used his work to illustrate the entanglements between history and physics, going back in time to show how his current area of research was created through historical discoveries in physics, and the gradual accumulation of knowledge over time leading to exciting new future discoveries and their practical, as well as theoretical, importance.

Although the organising committee were hampered by the last minute cancellation of the dinner venue, they rallied magnificently and we all dined happily on pizza in the park, sharing the respective food and alcohol that we had bought from our home nations for ISHA's well-known 'Nations Night,' and good natured discussion over points which had arisen in various workshops were continued over beer, wine, and the ubiquitous Berliner Luft from the ISHA Berlin branch well into the night.

Although the workshop was now officially over, those who remained in Bologna were treated to a tour of Villa Griffone, where physicist Marconi conducted his experiments on wireless telegraphy in the late nineteenth century, a world-changing field appreciated in both physics and history. Finally, we all departed in

the late afternoon, full of new insights and an overall agreement as to the success of the collaboration and convinced that this was a fruitful approach that I hope will be attempted by more student organisations in future.

Participation in the conference required a €70 fee (+ €10 to join ISHA) that covered all food, accommodation and excursions from Friday evening until Sunday afternoon.