

## **Call for papers for a special issue**

### **“The socio-economic impact of investment in science”**

**Edited by Prof. Massimo Florio, University of Milan, Italy**

The traditional Big Science model has a top-down approach; it is typically linked to military and national ambitions and characterized by secrecy and restricted access to methods and data. In contrast, the new Research Infrastructure (RI) paradigm of science production, exemplified by the “Geneva model” of CERN, or the Human Genome Project, has a bottom up approach; it involves an international coalition of funders, it is accessible by multiple users and adopts an open science approach. In Europe there are around three hundred major RIs supported by international coalitions and perhaps one thousand significant ones mostly funded by national governments, often with some support from the EU. Several hundred research infrastructures are operated or designed globally, including in developing economies, such as the Square Kilometer Array (SKA) in South Africa, or the Circular Electron positron Collider (CEPC) in China.

What is the social value of public investment in large scale science? How can we understand the new trends in the organization of knowledge production as a public good? What are the implications for economic growth and social justice?

Some of these issues are discussed in recent books such as Florio (2019), Gruber and Johnson (2019), Mazzucato, 2018.

This is an open call for papers for a special issue of the Annals of Public and Cooperative Economics on these questions.

The journal aims at publishing high-quality papers about how large-scale scientific projects (including particularly research infrastructures, technology hubs, research clusters, and other knowledge-intensive organizations) sustain growth, welfare, and social justice. We are interested in contributions based on different approaches, case studies and policy implications.

**A non-exhaustive list of topics includes the following ones:**

- Case studies of broad (global, national, local) impact of large-scale scientific projects
- Understanding the impact of scientific projects on growth, welfare and social justice
- Social cost-benefit analysis and other quantitative methods of impact assessment
- The cultural impact of science projects, including through social and traditional media
- Citizens attitudes and engagement on science
- The socio-economic impact of space science and technology, such as Earth Observation
- Public procurement for innovation in such fields as physics, astronomy, space science, and other capital-intensive domains
- Science and technology missions for public enterprises, development banks and other economic players
- Technological learning from research infrastructures, spin-offs, venture capital
- Intellectual property and government funded large scientific projects
- Big data and Big science: challenges and opportunities
- Science policy issues related to large-scale projects, mission-oriented policies and organizations

All papers should be submitted through the Annals of Public and Cooperative Economy online platform ([mc.manuscriptcentral.com/apce](https://mc.manuscriptcentral.com/apce)). Some papers may be also presented at the XVIII Milan European Economy Workshop (June 25th – 26th, 2020) organised by the Dept. of Economics, Management and Quantitative Methods, University of Milan, with the support of the Italian Space Agency ([meew@unimi.it](mailto:meew@unimi.it) for information). All papers, either presented at the workshop or directly submitted to the journal will be subject to anonymous review in line with APCE guidelines for submission. The deadline for all submissions for the special issue is October 30, 2020.

**References**

- Florio, M. (2019). *Investing in Science: Social Cost-Benefit Analysis of Research Infrastructures*. MIT Press.
- Gruber, J., & Johnson, S. (2019). *Jump-starting America: How breakthrough science can revive economic growth and the American dream*. Public Affairs, New York.

- Mazzucato, M. (2018). *The Entrepreneurial State: Debunking Public vs. Private sector myths*. Penguin (new edition).
- Stefano Clò and Massimo Florio, “Science, innovation, and public services: editorial introduction”, *Journal of Economic Policy Reform*, Vol. 23, 1, March 2020.

- **Call for papers opens: February 15, 2020**
- **Call for papers closes: October 30, 2020**
- **Submissions with indication “Special Issue” to <http://Mc.manuscriptcentral.com/apce>**