# "Open science": ambivalences and tensions - New borderlands between science, technology and society

## Call for Papers

Interdisciplinary International Graduate Summer School
University of the Basque Country UPV/EHU


Donostia-San Sebastian, Spain, July 27-31, 2020


The PhD Program in Philosophy, Science and Values (University of the Basque Country UPV/EHU, National Autonomous University of Mexico UNAM, and University Carlos III Madrid) the Institute for Technology Assessment and Systems Analysis (ITAS, KIT Karlsruhe) and the Human Technology Centre (HumTec, RWTH Aachen) will be hosting an International Summer School for PhD students, titled ""Open science": ambivalences and tensions - New borderlands between science, technology and society". The Summer School is part of the 39th edition of the UPV/EHU Summer Courses.

## Presentation

The present time is characterized by a distressing copresence of diverging dynamics such as digital transition, globalization, environmental crises, new forms of terrorism, new populism and many other dynamics pushing societies towards new answers about the old question of which forms of solving collective problems are both legitimate as well as effective. Thereby, we see two different forms of reaction which can be addressed as regressive forms of politics (e.g. protectionism, „post-truth", nationalism) on the one hand versus calls for open societies based on knowledge sharing and coproduction dynamics (e.g. EU's "three Os": Open Innovation, Open Science, Open to the World; European Commission 2016, 2017; Moedas 2015) on the other. Same to science, like the discourse of "sound" or "excellent" science on the one hand versus calls for "upstream engagement", "citizen science" and open science on the other indicate.

In any case, and this is our starting point here, while new borderlands between science, technology and society are emerging, troubling ambivalences might come to light as the opening-up might be aligned by closing down effects and vice versa. The ambivalence of "openness" is evident in the example of the EU strategies: The experimental processes of opening-up offer new

chances for the inclusion of lay-people or citizens into the innovation process and thereby an improvement of efficiency and legitimacy. But, at the same time "open science" becomes instrumental to certain economic goals by which civil society risks being represented as "users" with a "central and transversal role to play in bringing innovation to the market" (European Commission, 2016, p. 17). This raises the question: How open is the politics of open science? The guiding principle of "Opening-Up Science, Technology and Society" is presented as the solution – but at the same time raises questions about the cultural-institutional boundary conditions of open science in practice (e.g. Nerlich et al. 2018; McGray et al. 2018).

## Keynote lecturers

**Steve Fuller**, *is professor of sociology at the University of Warwick, Department for Social Sciences, UK*

**Christopher M. Kelty,** *is professor at the University of California, Los Angeles with appointments in the Institute for Society and Genetics, the department of Information Studies and the Department of Anthropology, USA.*

**Philip Mirowski,** *is professor of Economics and Policy Studies and the History and Philosophy of Science at the University of Notre Dame, USA*

## References

European Commission (2016). Open Innovation, Open Science, Open to the World – a vision for Europe. Luxembourg: Publications Office of the EU.

European Commission (2017). OSPP-REC: Open Science Policy Platform Recommendations. Luxembourg: Publications Office of the European Union.

Kelty, Christopher M. (2008). Two Bits. The Cultural Significance of Free Software. Durham.

Mayer, K. (2015). From Science 2.0 to Open Science: Turning rhetoric into action? STCSN-eLetter, 3(1). http://stcsn.ieee.net/e-letter/stcsn-e-letter-vol-3-no-1/from-science-2-0-to-open-science. Accessed: September 3, 2019.

McCray, AT, Berman F, Carroll M, Ginther D, Miller R, Schiffer P, Seidel E, Szalay A, Tauxe L, Xu H. (Eds.) (2018). Open Science by Design: Realizing a Vision for 21st Century Research. Washington.

Moedas, C. (2015). Open Innovation, Open Science, Open to the World (SPEECH/15/5243). "A new start for Europe: Opening up to an ERA of Innovation" Conference. June 22, 2015. Brussels.

Nerlich, B.; Hartley, S.; Raman, S.; Smith A. (2018). Science and the politics of Openness. Here be monsters. Manchester.

## Objective & Main Topics

The main objective of this summer school is to ask about the degrees of openness of societal systems and institutions in which scientific practices are developed, in order to calibrate the meaning and scope of institutionalized "open science" practices and to explore the possibilities for developing more alternative forms of distributed and collective "open sciences". In relation to different cultural and institutional constellations we ask of whether "openness" is a goal or a strategy to achieve the goal. "»Openness« is precisely the kind of concept that wavers between end and means." (Kelty 2008: 148). The ambiguous and uncertain status of "openness" can degrade but at the same time stimulate inventions of new modes for its operationalizability*:*

- *analyze the ambiguous notions of "open science" concerning its main epistemological and political dimensions while taking into account the contextual dependences of those dimensions. Anticipating and Exploring the potentialities of "open science" to develop alternative, distributed, collective forms of research related to alternative representations and imaginaries of the societal and technical realities (present and future).*

- *reflecting on the conditions and expectations of the underlying innovation systems and cultural-institutional constellations in order to analyze the (im)possibilities of developing socio-institutional reforms supportive of "open science" dynamics.*

- *collect actual experiences of "open science" initiatives around the globe (in the Western world and beyond) and to explore the potentialities (and hurdles) regarding the development of "open science" practices in different societal and national contexts.*

- *enable a critical and reflective examination of current "open science" strategies and modes/practices of operationalization.*

- *compare several case studies on science, and society constellations in specific national settings, which describe innovation systems, decision-making structures, institutional settings in detail. This could also include specific indicators, e.g. for innovation or studies of policy advice and policy making processes or more on cultural aspects of science and technology in societies.*

## Concept

The Summer School provides PhD students with the opportunity to develop their projects in a stimulating working atmosphere and in an international context. We aim at an inspirational environment for learning and discussion that ensures excellent feedback on everyone's work. In formats such as "Lecture", "Individual Presentation", "Workshop" and "Poster Presentation", a varied intellectual experience shall be created. At the same time, San Sebastian provides participants with the opportunity for a week of relaxed interchange, discussion and networking with experienced scholars and other PhD students.

- *Lecture:* Established researchers will present their basic positions in lectures.

- *Individual Presentation:* This format consists of a 30 minutes paper, in which PhD students present their project to the plenum. A senior scholar will provide comments on the presentation, based on a previously submitted paper- and the presentation will then be discussed in the plenum.

- *Workshop:* In a workshop, problems of relevance to the work of the PhD students will be addressed and discussed in small groups. Each group will be chaired by a researcher with considerable experience in the relevant field. In this intense format, the students will be able to submit and discuss their own concrete problems.

- *Poster Presentation:* PhD students bring a poster showing the key questions and issues related to their work. Creative designs are encouraged. The posters will be featured in a special session, presented in a Flash Talk and facilitate the mutual learning in the group.

The language of the Summer School will be English. On successful completion of the Summer School, the graduate will receive a certificate of attendance.

## Registration

The Summer School is open to PhD students at various stages of progress in their dissertation project. Please apply by sending us, at the latest by February 29th 2020, an abstract of max. 3.000 characters outlining your PhD project and in particular the background to the problem discussed, research questions as well as the methods and theoretical approaches to be adopted, together with a CV.

Please send your suggestions to Lilia Bolz (email: lilia.bolz@humtec.rwth-aachen.de). Applicants will receive notification of acceptance by March, 31th 2020.

Participation in the course is free of charge. Unfortunately, the organizers cannot cover any travel or accommodation costs. We would like to draw your attention to national sponsorship institutions like the DAAD (German Academic Exchange Service) in the case of Germany, who offer training course scholarships for students. In some cases, there might be the option of sponsorship by KIT (KHYS). Please contact your university's international office for further information on scholarships available in your country.

**Further information:** http://www.itas.kit.edu/english/events_2020_summerschool.php

**Organizers:** Andreas Lösch (ITAS/KIT), Andoni Ibarra (UPV/EHU), Hannot Rodríguez (UPV/EHU), and Stefan Böschen (RWTH/HumTec).