CS TRACK
Investigating Citizen Science

Understanding the nature of Citizen Science in a rapidly changing world – a half day symposium organised jointly by CS Track and ECSA

hosted by Museum für Naturkunde Berlin

Saturday, 8 October

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 872522.

Agenda

09:00 – 10:00	**Welcome to the CS Track Symposium - Understanding the nature of Citizen Science in a rapidly changing world**
Location	**Main auditorium**

During its 3 year lifetime, the CS Track project has been carrying out a thorough investigation into Citizen Science and many of its findings will be presented and discussed during this symposium. During this opening session, we plan to provide an overview of the project and its activities as well as discussing the wider context in which the project has been operating.

Speakers:

- **Raul Drachman & Reuma De Groot,** MOFET Institute/CS Track, Israel *Introduction to the CS Track framework for investigating Citizen Science through a combination of web analytics and social science methods*
- **Anna Berti Suman**, JRC, European Commission *Citizen Science transformations at the European Commission's Joint Research Centre*
- **Susanne Hecker**, First Chair European Citizen Science Association (ECSA) & Head of Science Programme Society and Nature, Museum für Naturkunde Berlin *ECSA's active involvement in European Citizen Science projects*

Moderator: **Sally Reynolds**, ATiT/CS Track, Belgium

10:00 – 10:45	**Computer-supported interactive analysis tools**	**Reaching a more informed understanding of citizen science**	**Science communication in citizen science projects**
Location	**Events space**	**Main auditorium**	**Seminar rooms 1&2**
	Interactive session with demonstrations of different analytics tools, data resources and findings from CS Track.	This session explores our understanding of citizen science from three perspectives which outline the significances and influences of citizen science, namely, scientific communities, empirical research, and policy & accreditation perspectives.	These hands-on workshops are aimed primarily at (prospective) CS project initiators or coordinators and split into two sessions.

	After a short introduction to a conceptual analysis framework that allows to categorize research questions and capabilities of tools concerning their level of (necessary) detail and expressiveness, the participants will have the opportunity to get to know CS Track's tool box for analyzing Citizen Science activities: A central source of data is CS Track's database of Citizen Science activities described and charaterised by an expressive set of descriptors that enables in-depth analyses of specific interests such as participation patterns, incentives, and interdisciplinarity. CS Track's analytics workbench allowing e.g., classification of Citizen Science activities according to research areas and sustainable development goals (SDG) as set by the UN or discovering links between various Citizen Science activities. Social Network Analysis methods to uncover the "careers" of Citizen Scientists within a Citizen Science activity (e.g. from "just a participant" to moderator for specific topics) and its implication for their behaviour. A Twitter Analysis tool set that can be used to generate insights on the impact of Citizen Science Activities on related topics and activities (such as education).	The first perspective will discuss the importance and relevance of the CS Track project and how it intends to lay the foundation for future work in CS research as well as to serve as a hub of research knowledge on CS within scientific communities. The second perspective will be addressed in a series of presentations on how our understanding of citizen science has developed with empirical research. Learning is an integral part of CS and the different projects include activities that afford learning opportunities for both professional scientists and citizen scientists. This presentation aims to unpack learning and its diverse contexts and how it may help to better understand the learning outcomes of citizen scientists. Citizen scientists typically participate in CS projects as volunteers. However, the reason for volunteering is not always clear, and maintaining participation has been a challenge for many project organizers. This presentation will look at the diverse motivations of citizen scientists.	In the first session, the team behind the CS Track eMagazine will share strategies for science communication in citizen science projects, provide an overview of relevant software and resources, and help participants explore an easy-to-use free data visualization tool. The second session will be dedicated to CS project descriptions. These short texts published on project websites or CS platforms are often the first point of contact between a CS project and prospective participants. By providing a glimpse into what the project in question is about and how it operates, they play a crucial role in attracting volunteers. In other words, the importance of an engaging, clear and concise project description can hardly be overstated. We will kick off the workshop by presenting a 10-step template for writing effective project descriptions. The template is based on our analysis of hundreds of real-life examples stored in the CS Track database and provides concrete suggestions and text examples for each step, as well as general advice on length, style and format. Following this short input, we will invite participants to analyse two project descriptions with us and share their impressions and comments.

	All tools and concepts will be explained by demonstrating current insights from CS Tracks research. Since Citizen Science is about actively involving their participants, we want participants to use our tools by themselves! Therefore, we kindly ask you to bring your own device (preferably a laptop computer or tablet as smart phones may suffer from too small a screen). WiFi will be available. No installation on any personal device needed. *Note: advance booking required*	Finally, the third perspective will discuss how CS can be viewed from policy and accreditation points of view. As CS becomes more and more integrated into practices of scientific communities the more interest there is to understand CS from organisational perspectives, e.g., how policy and accreditation will bond with CS. These presentations are followed by an opportunity for discussion on topics that may help citizen scientists, citizen science researchers, project organisers, stakeholders, etc. to attain a better overall picture of citizen science so that more informed decisions can be made regarding, e.g., implementing and evaluating citizen science projects and their activities. *Note: NO advance booking required*	During the final third of the session, they will have the opportunity to draft their own descriptions (for real or fantasy projects) and receive feedback from the group. Each session lasts 45 minutes and participants can switch sessions during the coffee break. *Note: advance booking required*
10:45 – 11:00	**Coffee break**		
11:00 – 11:45	**Computer-supported interactive analysis tools**	**Reaching a more informed understanding of citizen science**	**Science communication in citizen science projects**
Location	**Events space**	**Main auditorium**	**Seminar rooms 1&2**
	Interactive session with demonstrations of different analytics tools, data resources and findings from CS Track. (contd.)	Presentation and discussion session featuring results of CS Track and other projects (contd.)	Small group workshops focused on defining effective descriptors for Citizen Science and successful communication strategies (contd.)

11:45 - 13:00	**Measuring the unmeasurable - just how close are we to understanding the nature and potential impact of Citizen Science?**
Location	**Main auditorium**

During this panel discussion we will focus on the challenges faced by the research community in investigating citizen science. Panelists will give an overview of the work in which they have been involved and share their ideas about potential areas for further investigation. Audience input both welcome, and strongly encouraged!

Panelists:
Michael Pocock, Centre for Ecology and Hydrology, UK
Ulrich Hoppe, RIAS/CS Track, Germany
Raija Hämäläinen, JYU/CS Track, Finland
Rosa Arias Alvarez, Science for Change, Spain

Moderator: **Sally Reynolds**, ATiT/CS Track, Belgium

13:00 – 14:00	**Lunch**

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