

## **We Map Lights and Meteors: Configuring Citizen Science Participation In A Collaborative App Design Process**

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In our citizen science project Nachtlcht BühNe we are currently developing two mobile web applications in a participatory design process, in order to map light emissions (nightlight app) and fireballs (meteor app). Both apps are collaboratively designed by citizens and scientists for citizens and scientists, including ourselves. In the process, we are not only developing the apps, but also methods and means to facilitate reflexive prototyping and a participatory design process. In this paper, we reflect on these methods. First, we explore our “infrastructuring” work (Dantec and DiSalvo 2013) in various project stages. Second, we ask how our design choices configure and “inscribe the citizen scientist” (Woolgar 1991, Akrich and Latour 1992) in the apps we create. This applies to the citizen app co-developers, as we are constantly testing the app prototypes in their various development stages, and to future citizen app users that we are hoping to engage and inspire once the apps are ready for use. Third, we reflect on how we negotiated and navigated between app usability and data quality by developing ‘just good enough interfaces’ for collecting data for our multiple scientific, societal and political needs (cf. Gabrys and Pritchard 2018). Our methodological reflection profits from the fact that we can compare and contrast our different approaches and requirements in the participatory design of our two apps. We conclude with an outlook on what kind of world we hope to create with our project and approach.