Title: Can - and should - philosophy help to “open” science?

After describing the Open Science movement and its impact on contemporary research, I argue that Open Science as currently implemented risks acting as a reactionary force which reinforces conservatism, discrimination, commodification and inequality in research. Research on the impact of Open Data policies, for instance, shows how the rush to put research data online may have dire consequences, such as contributing to unregulated surveillance of individuals and communities (Taylor et al 2017); expanding existing divides and silencing knowledge from low-resourced environments (Bezuidenhout et al 2017); and privileging the re-use of existing data over the creation of data tailored to the research at hand (Leonelli 2017, 2020). These dangers can be averted by ensuring that Open Science policies acknowledge and promote epistemic diversity, for example by: challenging traditional communication channels and entrenched power structures within academia; and fostering a pluralist ecosystem of perspectives, methods and norms that is explicitly tailored to the situation, goals and resources of researchers. As I shall illustrate, the political steps taken so far in these directions need to be underpinned by a philosophical framing of the significance of epistemic diversity in research. The argument builds on the extensive philosophical literature on epistemic pluralism; my experiences as Open Science advisor to the European Commission; and empirical studies of Open Science practices (e.g. Leonelli 2013, Levin and Leonelli 2017).