## SOE 11: Invited Talk Dirk Brockmann: Big Data in Epidemic Dynamics (joint session SOE/DY)

Time: Wednesday 9:30–10:15 Location: H11

Invited Talk SOE 11.1 Wed 9:30 H11
The Corona Data Donation Project - When Citizens Collaborate to Fight a Pandemic — • DIRK BROCKMANN — Humboldt University of Berlin, Berlin, Germany

In response to the COVID-19 pandemic we launched the Corona Data Donation Project in April 2020. In this citizen science project participants donate physiological data on heart rate, sleep and physical activity measured by smart watches, fitness trackers and wearable devices on a daily bases. With more than 500,000 donors the project is the largest data donation project worldwide. Initially conceived as

a tool for real-time syndromic surveillance of the Covid-19 pandemic and as a monitoring tool, it has evolved into a large scale experimental and exploratory technological framework that continues to reveal a number of fascinating insights concerning Covid-19 related topic such has Long-Covid, the effects of vaccination, sleeping patterns but also insights with broader applications. The project now hosts physiological time-series that span over two years of over 200,000 individuals. I will discuss the promises and discoveries of citizen science and wearable devices from the perspective of digital epidemiology and illustrate what role "physics"-thinking plays in projects like this.