Objective of the project “Breaking the Wall” (funded by Austrian Research Funds FWF) is to design a performance to research participation of the audience at live concerts, additional a counter-performance to provoke critical questions of digital development regarding Industrial Revolution 4.0. The field of audience participation has a rich history of custom-built instruments and devices, and ways to facilitate collaborative performances. Recent advancements in sensor and interface technology have further increased this potential. While research on audience participation shows both practical as well as theoretical perspectives, a structured creative and evaluated approach to fully explore the artistic potential is missing so far. Thus, this art-based research project addresses the central research question “Which new ways of artistic expression emerge in a popular form of music performance when using playful interfaces for audience participation to facilitate interactivity among everybody involved?” and “How can art projects enhance critical requests on digital evolution, how information is collected and easily abused”. On the one hand interfaces, which include the use of lasers, robots and smartphones to facilitate audience interaction are deployed in several live events, while on the other hand, the subtle interventions of the artists point at the issue of awareness how personal information can be collected without the knowledge of the spectator, the passive consumer. The project team is interdisciplinary comprised of popular music artists, and researchers covering diverse areas such as media arts, art education (pedagogy), computer science, human-computer interaction, game design, musicology, ethnomusicology, technology and interface design.