Ludvig Elblaus  
PhD Candidate, programmer, artist, musician  
KTH Royal Institute of Technology (Sweden)  

Carl Unander-Scharin  
PhD, Professor, Composer, Opera singer  
University College of Opera, Stockholm (Sweden)  

Åsa Unander-Scharin  
PhD, Professor, Choreographer, Dancer  
Luleå University of Technology (Sweden)  

Which scenic subjects may emerge when interacting with machines through vocal and bodily virtuosity? (Workshop)

Which scenic subjects may emerge when interacting with machines through vocal and bodily virtuosity? Building on our team’s work with enhanced cross-over multi-modal expressivity through embodied interaction in opera and dance, we propose to present a participatory workshop at CARPA4. The workshop will include hands-on interaction with our custom-built technologies in order to spur discussion that we hope will inform the work that we undertake towards new premieres with the same artistic technologies. During a long-standing collaborative work, the team has developed new artistic tools where technology offers means to e.g. let bodies sing, let robots dance and to let opera singers accompany themselves through bodily interaction. Performing with emerging artistic technology offers insights into perceptions of new scenic subjects and raises questions of what is human and non-human. We suggest that artistic expressivity is re-constituted through virtuoso interaction with machines Our workshop will include an overview of our previous technologies (such as The Coloratura Machine, The Vocal Chorder, Robocynge, The Throat III, The Charged Room and The Virtual Viola da Gamba) as well as probe and discuss our completely new tool for virtuoso gestural control of extreme vocal expression.

Ludvig Elblaus is a composer and performer of music and audiovisual art who currently is examining his practice through research at the Sound and Music Computing group at the KTH Royal Institute of Technology in Stockholm, Sweden.

Carl Unander-Scharin is a Swedish composer and operatic tenor, PhD and Professor. Born in Stockholm, he studied in his native city at the Royal College of Music and the University College of Opera. He specializes in high lyric tenor parts, and is affiliated to the Swedish Royal Opera, Malmö Opera and Folkoperan. In parallel with his extensive activities as a singer, Carl is a prolific composer and has composed nine operas, as well as music for TV, film, dance, choral works, oratorios, and interactive works. Between 2011-2014, Carl was Visiting Professor at the University College of Opera, a position he currently holds at Karlstad University.
Åsa Unander-Scharin is a choreographer and researcher in dance, opera, robotics and interactive performance technology. She acquired her PhD for the thesis: “Human mechanics and soulful machines” in 2008. In 2012, the robotic swan Robocygne inaugurated the International Tanzmesse in Düsseldorf and the giant marionette Olimpia was performed in the context of Opera Mecatronica at Swedish Royal Opera House and Rotterdam Opera Days. She holds a position as Associate Professor in Art and technology at Luleå University of Technology and is a member of The Committee for Artistic Research at The Swedish Research Council.