



Hochschule der Künste Bern
Haute école des arts de Berne
Bern Academy of the Arts

Performing Mobile Technologies



24/25 October 2025

Programme (draft, 15 September 2025)

www.hkb-interpretation.ch/smartphones

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Friday, 24 October 2025

HKB, Kammermusiksaal, Papiermühlestr. 13a, Bern

- 10:30 **Welcome**
- 10:45 **Thomas Gartmann (Bern)**
Wie das Smartphone musikalisch wurde.
Genealogie und Zukunft eines Instrumentes
- 11:30 **Volkmar Klien (Linz)**
SADISS – A Socially Aggregated, Digitally Integrated Sound System
- 12:15 *Lunch break*
- 13:45 **Frauke Behrendt (Eindhoven)**
Telephones, Music and History.
From the Invention Era to the Early Smartphone Days
- 14:30 **Anders Lind (Umeå)**
MOBILEPHONEORCHESTRA.COM:
A Framework for Expressive Participatory Performances
- 15:15 *Coffee break*
- 15:45 **Cathy van Eck (Bern)**
Listening to Birds through Mirrors
- 16:30 **Oliver Hödl (Wien)**
From Concerts to Classrooms:
The Multifaceted Role of Smartphones in Music
- 17:15 **Gena R. Greher (Lowell/San Diego)**
Developing the Art of Playing with Sound: There are Apps for That
- 18:00 *Break*

HKB, Multifunktionsraum, Papiermühlestr. 13d, Bern

- 18:30 **Concert**
Performing Mobile Technologies
- 20:00 *End of the conference day*

Saturday, 25 October 2025

HKB, Kammermusiksaal, Papiermühlestr. 13a, Bern

- 9:30 **Dan Wilcox (Karlsruhe)**
Three Mobile Apps for Embodiment & Exploration:
PdParty, SpeedPitch, ShadowPlay
- 10:15 **Michael Harenberg (Bern)**
Der berührte Klang. Embodiment
algorithmischer Komposition im Zeitalter von KI
- 11:00 *Coffee break*
- 11:30 **Marcel Zaes Saegesser (St. Pölten)**
Ubiquitous Media & Performing Sonic Spaces: Thinking the “Setting” Series
as a Growing Archive
- 12:15 **Jasmin Goll (Bern)**
Alone Together? Music by Telephone Wires, 1877–1930
- 13:00 *Lunch break*
- 14:30 **Maurice Oeser (Freiburg i. Br.)**
iPhone statt Lautsprecher – das Smartphone als Medienbühne im Konzert
- 15:15 **Lara Stanic (Bern)**
Performing Mobile Technologies.
The Smartphone as a Performance Tool in Composition and Sound Art
- 16:00 *Coffee break*
- 16:30 **Johannes Werner (Bern)**
Postdigitale Performer:innenkörper in immersiven Fixed-Media-
Umgebungen und Interfacezentrismus
- 17:15 **Philippe Kocher (Zürich)**
AMBAR Soundbox. A Web App for Learning Sound Synthesis
- 18:00 *End of the conference*

Abstracts and Biographies

Thomas Gartmann (Bern)

Wie das Smartphone musikalisch wurde.

Genealogie und Zukunft eines Instrumentes

Das Smartphone und die Musik verfügen über eine lange gemeinsame Vorgeschichte. Seit den Anfängen des Telefons wurde dieses auch für die Übertragung von Opern genutzt und erlebte mit dem Theatrophon eine frühe Blüte. Im Opern-Hacking und im Streaming erfuhr es Revivals. Die Übersicht streift aber auch, wie die technischen Entwicklungen des Handys zu neuen musikalischen Anwendungen führten und welche Potenziale noch ungenutzt scheinen.

Thomas Gartmann promovierte zum Instrumentalwerk von Luciano Berio. Als Journalist (NZZ und Radio DRS2) und Leiter Musik bei der Kulturstiftung Pro Helvetia beschäftigte er sich mit neuer Schweizer Musik. Heute leitet er die Forschungsabteilung der HKB. Zu seinen Forschungsschwerpunkten gehören Musik und Politik, Musik und Medien, Improvisation sowie zeitgenössische Musik. Jüngere Publikationen: *Von der Fuge in Rot zur Zwitschermaschine. Paul Klee und die Musik* sowie je zwei Bände zu Othmar Schoecks historisch belasteter Oper *Das Schloss Dürande* und zum Schweizerischen Tonkünstlerverein.

Volkmar Klien (Linz)

SADISS – A Socially Aggregated, Digitally Integrated Sound System

SADISS is a web-based application developed at the Institute for Composition, Conducting and Computer Music of the Anton Bruckner University Linz. SADISS enables socially aggregated, digitally integrated sound and performance systems in two different ways. It enables massively multi-channel sound systems for re-synthesizing compositions right in the middle of the gathering of listeners using their smartphones' loudspeakers. Secondly it facilitates ad hoc ensembles of human singers or performers, individually guided (potentially synchronously in different languages) via headphones. In doing so SADISS opens wholly new fields for composers and artists to explore.

Growing up in Vienna, **Volkmar Klien** spent his childhood engulfed in the city's rich musical life with all its glorious traditions and engrained rituals. Working from this background Volkmar Klien today strives to extend traditional practices of composing, producing and listening far beyond the established settings of concert music. He works in various areas of the audible and occasionally inaudible arts navigating the manifold links in-between the different modes of human perception, the spheres of presentation and the roles these play in the communal generation of meaning. He is a professor for composition at the Anton Bruckner University in Linz.

Frauke Behrendt (Eindhoven)

Telephones, Music and History.

From the Invention Era to the Early Smartphone Days

This presentation focuses on the musical history of the telephone, an aspect of telephonic history that is often overlooked and has not yet been given systematic academic attention. It is structured around two themes: (1) public performances of telephones as musical instruments, and (2) the telephone network as a musical instrument. It contributes to our understanding of the musical uses of telephones

throughout history, which is relevant both for understanding contemporary uses of telephone technologies, such as smartphones, and for gaining a richer understanding of historic telephone uses.

Dr Frauke Behrendt is Associate Professor in Transitions to Sustainable Mobility at the Technology, Innovation and Society Group at the Eindhoven University of Technology. Her expertise is on smart and sustainable mobility as well as digital/data culture and society. Behrendt's research is located at the intersection of three key themes: Mobility, Sustainability and Digitalization. It engages at the local, national and international scale, investigates a range of modes, explores the past, present and future – and considers the user experience, the design and industry perspective, and the policy landscape – of how we can move towards radically more sustainable mobilities.

Anders Lind (Umeå)

MOBILEPHONEORCHESTRA.COM:

A Framework for Expressive Participatory Performances

This presentation outlines the artistic framework of *mobilephoneorchestra.com* (MPO), a project initiated in 2016 to explore participatory performance practices within contemporary art music. Central to the MPO is the multi-part animated music notation (score and conductor) system, used to facilitate sonic textures such as polyphonic melodies, harmonic layers, and sample-based soundscapes. Performed by youths – often natural virtuosos on smartphones – the MPO serves as a flexible electronic instrument group, extending traditional orchestras, ensembles, and soloists, or functioning independently.

Anders Lind is a composer, sound artist, and researcher, situated as artistic associate professor at Umeå University in Sweden. His artistic research is focused on animated music notation and participatory performance practices within contemporary art music. His work has been presented, exhibited, and performed all over the world. Currently, Lind is engaged in a three-year artistic research project with a Swedish opera house focused on his Mobile Phone Orchestra performance concept. More info: <http://soundlikelind.se>.

Cathy van Eck (Bern)

Listening to Birds through Mirrors

In this talk I would like to explore how I compose for body-worn sonic performance systems. These systems connect body movements to sounds. By using sensors movements are captured and these data are used for controlling different kinds of sounds processing. A focus point would be how these mappings evolve over time.

Cathy van Eck is a composer, sound artist, and researcher in the arts. She is interested in setting movements, actions and gestures into relationships with a rich palette of different sounds, exploring peculiar sonic sceneries. The result could be called “performative sound art”, since it combines elements from performance art, electronic music, and visual arts. Cathy is a professor at the Bern Academy of the Arts, Switzerland. Her book *Between Air and Electricity – Microphones and Loudspeakers as Musical Instruments* has been published in 2017. She is a member of iii (instrument inventors initiative), an artist run organisation supporting new interdisciplinary practices linking performance, technology and the human senses.

Oliver Hödl (Wien)

From Concerts to Classrooms: The Multifaceted Role of Smartphones in Music

This presentation provides an overview of various research projects exploring the use of smartphones in the field of music. Smartphones are utilised as sensor-based interfaces for new digital musical instruments, tools for interactive audience participation and embodied effects control, as well as platforms for distributed performances employing ultrasound communication. The applications span music concerts, interactive installations, and educational contexts.

Oliver Hödl (*1982) is a computer scientist and independent musician, holding a professorship at the University of Applied Sciences Upper Austria and teaching as a Privatdozent at the University of Vienna. He spent significant parts of his doctorate – completed in 2016 with distinction – in England at universities in Nottingham, Milton Keynes, and London. He has successfully led large international research projects with total budgets of 30 million euros, with over 24 million euros under his responsibility as Principal Investigator (PI). He has an extensive track record of more than 50 publications and his artistic work includes over 100 concerts and installations worldwide, more than 30 compositions, and 4 CD releases.

Gena R. Greher (Lowell)

Developing the Art of Playing with Sound: There are Apps for That

Embracing multiple ways of being musical, Papert and Resnick¹ stress the importance of creating learning environments for students to follow their imaginations, allowing them to feel personally invested. Traditional ensemble driven music instruction leaves little room for creative music-making, sound exploration, improvisation and composition experiences. Music making through more intuitive and user-friendly mobile technology, helps create a sense of community while engaging students through participatory, collaborative experiences. This interactive presentation will highlight the creative potential of mobile technology to transform music-making experiences.

Dr. Gena R. Greher is Professor Emerita of Music Education at the University of Massachusetts Lowell. She is the 2014/15 Donahue Endowed Professor of the Arts. Gena developed math/music modules with Jeanne Bamberger for the Herbie Hancock Institute's STEAM Initiative (<https://mathsciencemusic.org>), building on her work with Computer Science colleague Jesse Heines as Co-PI on two NSF grants: "Computational Thinking through Computing and Music", and "Performamatics: Connecting Computer Science to the Performing, Fine, and Design Arts". Gena is a former President of the Association of Technology in Music Education (ATMI).

¹ Seymour Papert: A Critique of Technocentrism in Thinking about the School of the Future, in: *Children in the Information Age. Opportunities for Creativity, Innovation, and New Activities*, Oxford: Pergamon Press 1988, pp. 3–18; Seymour Papert: *The Children's Machine. Rethinking School in the Age of the Computer*, New York: Basic Books 1993; Mitchel Resnick: *Lifelong Kindergarten. Cultivating Creativity through Projects, Passion, Peers and Play*, Cambridge: MITP 2017.

Concert

With works by

Tobias Hagedorn – *Linien*

Anders Lind – *Mobile Phone Orchestra*

Philippe Kocher – *Playing the Piano (Installation)*

Volkmar Klien – *Are the Birds Happy*

Lara Stanic – *8811, spiel was Schönes*

Cathy van Eck – *Bewegung*

Dan Wilcox – *SpeedPitch*

Marcel Zaes – *Setting*

as well as compositions of HKB Sound Arts Bachelor students

Dan Wilcox (Karlsruhe)

Three Mobile Apps for Embodiment & Exploration:

PdParty, SpeedPitch, ShadowPlay

Thinking outside the laptop, it's 2025 and the post-digital instrument has been hiding in your pocket all along: realtime audio, multitouch, sensors, connectivity. What are ways artists and musicians can utilize this powerful handheld computer for new exploration of sound and space? This talk presents three examples developed by the author: PdParty, a computer music platform for running Pure Data patches on Apple mobile devices; SpeedPitch, a simple augmented sonic reality experiment that alters music playback speed based on your actual GPS ground speed; and ShadowPlay, an exploration of the architecture and light in outdoor spaces through sound.

Dan Wilcox is an artist, engineer, musician, performer who combines live musical performance techniques with experimental electronics and software for the exploration of new expression, often through themes of science fiction, space travel, cyborgification, and far futurism. His father was an aerospace engineer, he grew up in the Rocket City, and has performed in Europe, Asia, and around the US with his one-man band cyborg performance project, robotcowboy. Dan currently lives in Karlsruhe, Germany and is an artist & researcher for the ZKM | Hertzlab. <https://danomatika.com/>

Michael Harenberg (Bern)

Der berührte Klang. Embodiment algorithmischer Komposition im Zeitalter von KI

Abstract folgt

Prof. Dr. **Michael Harenberg** studierte systematische Musikwissenschaft in Giessen und Komposition in Darmstadt. Er promovierte in Medienwissenschaften zum Thema «Virtuelle Instrumente im akustischen Cyberspace» in Basel. Harenberg ist Gründungsmitglied und von 2002 bis 2022 Co-Leiter des Studiengangs Sound Arts an der Hochschule der Künste in Bern (hkb-soundarts.ch). An der HKB unterrichtet er Komposition, Sounddesign und Medientheorie. Er war Stipendiat des Centre Acanthe in der Meisterklasse Komposition bei Luigi Nono 1989, der Darmstädter Ferienkurse 1988–1998 sowie des Experimental-studios der Heinrich-Strobel-Stiftung des Südwestfunks in Freiburg/Breisgau von 1988 bis 1992. 2016 wurde er mit der Edgar-Varèse-Gastprofessur für Computermusik des DAAD an der TU-Berlin ausgezeichnet.

Er war und ist Leiter verschiedener Forschungsprojekte mit einer internationalen Vortrags- und Publikationstätigkeit.

Marcel Zaes Saegesser (St. Pölten)

Ubiquitous Media & Performing Sonic Spaces:

Thinking the “Setting” Series as a Growing Archive

“Setting” is an archive of recorded performances in which amateur participants carry ubiquitous sound devices on found outdoor spaces. After recording a sound of their liking into a custom app, the participants reenact the captured audio on their phone while moving on the outdoor site. The custom app at once acts as a sound player and as a mobile guiding system. The artist offers insights about the idea of a distributed loudspeaker system enacted by an ephemeral “chorus” on arbitrary sites, with a focus on the relationship between sound and space through mediated, and archived, reenactments.

Marcel Zaes Saegesser is an artist and researcher focused on audiovisual and sonic media. His work combines practice-based and academic methods to explore the impact of technological environments on human experiences, especially in urban areas. He earned a PhD in Computer Music & Multimedia from Brown University and served as an Assistant Professor at the Southern University of Science and Technology in Shenzhen. In 2025, he joined the St. Pölten UAS. His creative research has been published widely in museums, concert halls, academic conferences and journals across North America, Asia, and Europe.

Jasmin Goll (Bern)

Alone Together? Music by Telephone Wires, 1877–1930

Between 1877 and 1930, transmitting concerts and opera performances by telephone was a popular method for promoting the telephone and disseminating music over distance in North America and Europe. They brought live music to households and public spaces and often pursued a democratic approach. By analyzing selected cases, this talk focuses on the interplay of the networked infrastructure with the listening and musical practices tied to music by telephone. Under Jonathan Sterne’s term “alone together” (2003), the paper thus uncovers a paradoxical tension of togetherness and isolation.

Jasmin Goll is a PhD candidate at the Institute of Musicology at the University of Bern, Switzerland, working on her project “(Dis)Connected by Wire. Music by Telephone Wires as an ‘Audible Infrastructure,’ 1877–1930.” From September 2024 until May 2025, she was a visiting scholar at New York University and a short-term fellow at the German Historical Institute in Washington D.C. Jasmin Goll holds an MA in musicology from Humboldt University of Berlin and a BA in musicology and theater studies from the University of Bayreuth.

Maurice Oeser (Freiburg i. Br.)

iPhone statt Lautsprecher – das Smartphone als Medienbühne im Konzert

Neben der klassischen Konzertsituation mit Lautsprechern und Leinwänden, ist die direkte Nutzung der Smartphones des Publikums in den letzten Jahren vermehrt in den Fokus gerückt. Mittlerweile hat ein Grossteil des Publikums ein modernes Gerät bei sich, welches enorme künstlerische Möglichkeiten eröffnet. Bei der Auflösung der Trennung von Bühne und Publikum entstehen jedoch ganz neue technische und

kreative Hürden. Dieser Vortrag ist ein Versuch, die wichtigsten Erfahrungen zu bündeln und einen praktischen Leitfaden an die Hand zu geben.

Maurice Oeser erhielt seine musikalische Grundausbildung in Cello und Klavier. Es folgte ein Studium im Fach Musikdesign an der Staatlichen Hochschule für Musik Trossingen. Zwischenzeitlich arbeitete er als Musikinformatiker der Firma Klangerfinder GmbH an unterschiedlichsten Projekten der Kultur-, Kommunikations- und Automobilindustrie. Seit 2017 ist er in der Klangregie im SWR Experimentalstudio tätig und war an zahlreichen internationalen Konzert- und Opern-Aufführungen beteiligt.

Lara Stanic (Bern)

Performing Mobile Technologies.

The Smartphone as a Performance Tool in Composition and Sound Art

In my research and dissertation project, I explore the technical possibilities as well as the artistic and aesthetic dimensions of smartphones in compositional and sound art practice. Since the introduction of the smartphone in the first decade of the 21st century, a wide range of experimental art forms have emerged that utilize and explore the possibilities of this technology. In this lecture, I will present the findings and research results gained from corpus research, qualitative content analysis, expert interviews and my own compositional works and developments.

Lara Stanic is a classical musician, composer, sound and performance artist. She works in the fields of contemporary music, electronic music, music theatre, and performance art. Lara Stanic develops her own solo performances, composes for soloists, ensembles and electronics. Since 2011 she is a lecturer for the Performing New Technologies module in the CAP Contemporary Arts Practice master programme at Bern Academy of the Arts. Lara Stanic is currently working on her doctorate on the subject of "Smartphones as a Performance Tool in Composition and Sound Art" at the Anton Bruckner University Linz in collaboration with the Bern Academy of the Arts. www.larastanic.ch.

Johannes Werner (Bern)

Postdigitale Performer:innenkörper in immersiven Fixed-Media-Umgebungen und Interfacezentrismus

Der Vortrag behandelt die Rolle der performenden Körper in immersiven multimedialen Musiktheaterkompositionen. Anhand aktueller Arbeiten von Alexander Schubert und Brigitta Muntendorf wird aufgezeigt, wie sich Figurenentwicklung und Performanz in postdigitaler Komposition – speziell in Fixed-Media-Umgebungen – transformieren.

Unter dem Einfluss interfacezentrierter Setups, die blickdichte Oberflächen erzeugen, verändert sich die Präsenz von Körpern und Instrumenten, was Fragen zu ihrer Rolle als Medium des komponierenden Subjekts innerhalb eines gewachsenen Produktionsvolumens aufwirft.

Johannes Werner arbeitet als Komponist, Schlagzeuger und Performer in multimedialen Settings und kollektiven Gefügen und entwickelt zeitgenössische Formen von Musiktheater, Klangkunst und Performance. Er ist Gründungsmitglied von sh|ft ensemble, musikalischer Leiter des internationalen Theaterkollektivs Punch AG, Drummer der Spoken-Pop-Formation Cruise Ship Misery und künstlerischer Leiter der Konzertreihe Xchanges. Seit 2024 forscht er zu postdigitaler Musikpraxis an der

Hochschule der Künste Bern. Er studierte Schlagzeug und Neue Musik in Stuttgart und Stockholm sowie Komposition in Bern.

Philippe Kocher (Zürich)

AMBAR Soundbox. A Web App for Learning Sound Synthesis

The AMBAR Soundbox is a browser-based, graphical programming environment for beginners in sound synthesis. It is being developed as a teaching tool for schools and offers an easy-to-understand user interface with integrated explanations and help. Due to its platform independence, it can also be used on smartphones. This contribution presents the current state of the project and reports on initial practical experiences.

Philippe Kocher is a musician, composer and researcher. He studied piano, electroacoustic music, music theory, composition and musicology in Zurich, Basel, London and Bern. He is a professor of music theory, composition, and computer music at the Zurich University of the Arts (ZHdK) and conducts research at the Institute for Computer Music and Sound Technology (ICST). Philippe's work encompasses instrumental and electroacoustic music as well as sound installations. His artistic interests focus on algorithmic composition and computer-generated music and art. www.philippekocher.ch