

Coming Up for Air in [LOCATION]

An art-research initiative exploring the critical effects of Indoor Air Quality (IAQ)

Coming Up for Air IN [LOCATION] is an ongoing art-research initiative led by Kathryn Williams and Bofan Ma, a duo of practice-researchers who equally share roles as composers and performers. The initiative explores the intersection of music, technology, and environmental health, with a focus on interdisciplinary and intermedia musical practices shaped by the critical effects of indoor air quality (IAQ). Specifically, it integrates live performance with interactive installations, using real-time IAQ data to generate sound and visuals from invisible particulates in the air within an indoor environment.

The initiative is driven by a timely and crucial question: *What and who is changing our air today?* Building on Williams' solo project *Coming Up for Air* (2017–present, inspired by her experiences with chronic respiratory conditions), the duo aims to position IAQ as both a critical access need for those with respiratory conditions and a basic human right. Through artistic practice, they strive to bring attention to indoor air pollution - one of the most significant contributors to premature deaths globally, as identified by the World Health Organization. They are dedicated to exploring artistic responses to this often-overlooked issue and its impact on health and well-being.

Phase 1 of the initiative took place in summer 2024 in the Rossendale Valley in North West England, where Williams and Ma partnered with local arts venues, primary schools, and IoT Horizon Ltd. – a leader in digital transformation through Internet of Things solutions. These partnerships enabled the duo to have secured access to mobile IAQ sensors and an advanced dashboard API for real-time data collection and data-informed artistic processes. This 6-month phase culminated in a series of educational outreach activities with local Key Stage 2 primary school pupils, as well as 8 interactive performance-installations premiered at the community-facing Waterfoot Wakes Festival 2024.

In this presentation, Williams and Ma will reflect on their experience bringing Phase 1 of *Coming Up for Air in [LOCATION]* to fruition. Specifically, they will discuss a new model of artistic research that revolves around knowledge exchange collaborations, bringing together arts practitioners, private sector digital innovators, higher education institutions, and the local community. They will also discuss their plans to further these research directions, and existing / potential challenges around this novel interdisciplinary approach, as they continue to advocate for critical respiratory health access through music-making and the creative arts.

Parallel Session



Left: Kathryn Williams | Right: Bofan Ma

Name and Last name: Bofan Ma & Kathryn Williams

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Bios:

Kathryn Williams and Bofan Ma are a duo of composer-performers who are passionate about making an impact through data-rich intermedia performances. They strive to make visible – through music and technology – the interplay between eco-friendly sustainable performing arts infrastructure and musicians' health and well-being. Basing their post-doctoral research at the Centre for Practice & Research in Science & Music (PRiSM) at the Royal Northern College of Music in Manchester, their work engages closely with accessible digital instruments, as well as cutting edge research in applied artificial intelligence and human computer interface.

Outside this collaboration, Kathryn Williams is a versatile flutist, creative collaborator, and an experienced educationalist. Her work focuses on making tangible connections between instrument and body, interrogating ideas around accessibility and physical limitation. Her project *Coming Up for Air* has been described as "ingeniously inventive" (TEMPO) and performed around the world, featured in Breathe Magazine, Pan Journal, TEMPO, and broadcast on BBC Radio 3 The Listening Service and PBS Melbourne. An album of 40 "strangely fascinating" (BBC Music Magazine) single-breath pieces was released in 2019 on Huddersfield Contemporary Records and distributed by NMC.

Originally from China, Bofan Ma makes music that embodies a normalised, transnational

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creative identity, addressing issues around cultural bias, inclusion, and accessibility in the age of AI. He has worked with ensembles/initiatives including the International Contemporary Ensemble (ICE), SHCM Chinese Symphony Orchestra, London Sinfonietta, Distractfold, Psappha, ANU Productions Ireland, Ensemble X.y, Vonnegut Collective, Music Theatre Wales, with his music being played across China, continental Europe and the USA. He is one of the co-founders of the composer collective The Incógnito Project, as well as Chair of the Manchester branch of the international Contemporary Music for All (CoMA) network.