

Conference / Performance

- IRCAM Forum 2026
- 18-21 March 2026, IRCAM, 33 Rue Saint-Merri, 75004 Paris
- Link to conference: <https://forum.ircam.fr/collections/detail/ircam-forum-workshops-paris-enghien-les-bains-2026/>

Title

Diffuse Architectures

Abstract

Diffuse Architectures is a spatial sound composition for the IKO - a spherical loudspeaker array - and the acoustic environment it inhabits.

Rather than treating the physical space as a neutral container for sound, the work repositions it as an active compositional force. The piece unfolds in four connected sections - Invocation, Listening Walls, Resonant Collapse, and Signal Drift - tracing a journey from deliberate, focused projection toward dispersed and unpredictable resonance.

Synthetic material is woven together with field recordings captured across a range of physical sites using Higher Order Ambisonics (HOA EM64), creating a layered sonic architecture that continuously evolves in response to the space and the audience within it. These recordings are actively transformed through the use of Spat 5 tools, including augmentation of impulse responses, to transmute perceptual space into compositional material.

Against the idea of music as a self-contained object deposited into a room, this work proposes something more entangled. The IKO is constitutively bound to its surroundings - the space is not a vessel for the composition but part of its substance, active and transformable.

Diffuse Architectures is developed as part of an artistic residency with the Acoustic and Cognitive Spaces team at IRCAM-STMS, Paris, as part of ongoing research into material environments and the IKO loudspeaker as a novel spatial musical instrument - one whose singular relationality between sound, space, and listener offers new possibilities for the art of composition.

The performance was accompanied by a short presentation of key experiments and research undertaken as part of the residency.

