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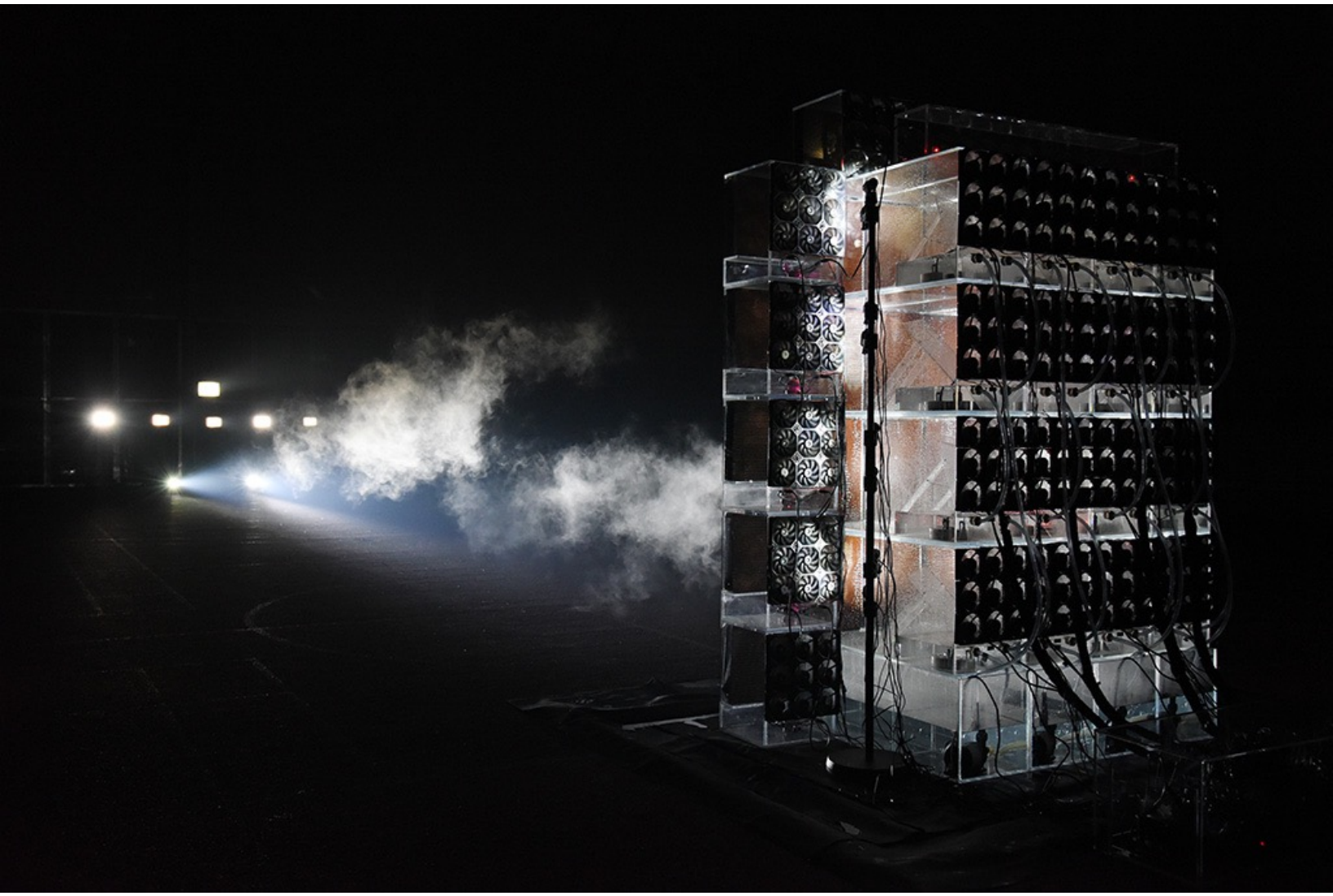
PORTFOLIO

The ***Mist Collector*** **(2015 - 2020)** project, carried out in collaboration with scientists Camille Duprat and Jean-Marc Chomaz at the École Polytechnique in Paris, France addresses the issue of diminishing sources of fresh water in the world and looks at alternative methods of obtaining water from fog. Fog is especially pertinent in arid, mountainous regions of the world, where there is little or no precipitation or groundwater and where it becomes the only water source for plants, animals and people. However, low water collection efficiency impairs the possibility of using it on a larger scale. Our project is driven by a desire to contribute to innovative solutions that can improve living conditions and create poetic messages that will bring a more embodied awareness of the global water situation. It points out the necessity of the collaborative spirit required to combat environmental challenges we face today. Our artistic and scientific research has led us to question the standard approaches used in current fog harvesting techniques, and has inspired us to come up with a new paradigm of replacing the net-meshes by a forest of flexible parallel fibres. Our investigation has concentrated on understanding the principles of water droplet coalescence on parallel fibres, production of artificial fog and on the development of aerodynamic structures that could improve water collection. Based on these findings several artworks have been created.



Nephelograph (Mist Impressions), Nuit Blanche, Paris,France.

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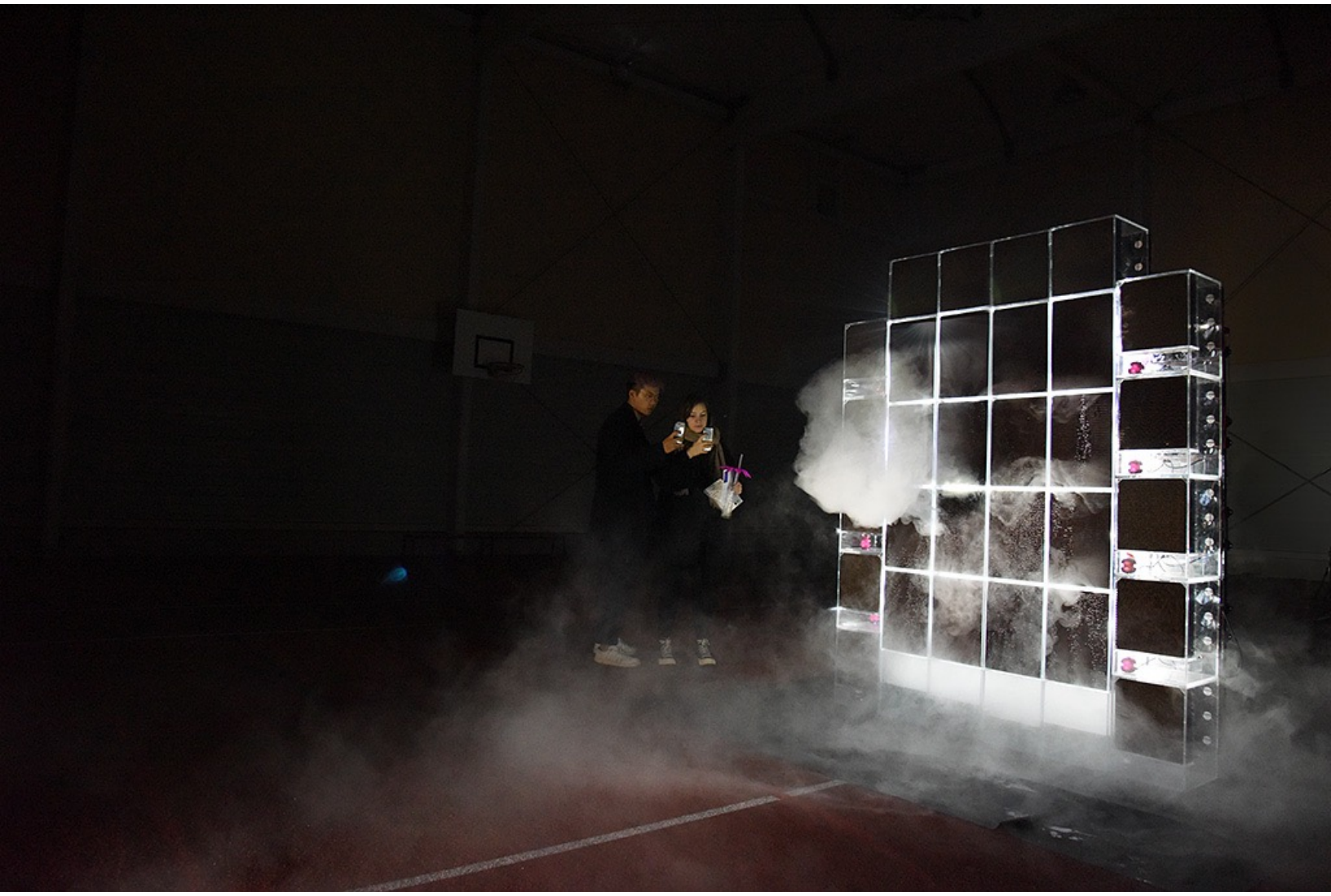
Nephelograph (Mist Impressions) is a cloud machine that deals with the production of large quantities of artificial fog and permits the scribing of different cloud formations. It consists of multiple, stackable units made from clear plexiglass with submerged ultrasonic misters that produce a current of fog bouncing against an obstacle (a leaning transparent plaque) to create a turbulent mass, which is then pushed by the ventilators through honeycomb filter. *Nephelograph* takes its name from the Greek word for clouds. Working together with electronic music composer Daniel Schorno, we created a multi-sensory environment, where viewers/participants are able to touch the clouds and participate in an auditory dialogue with them. *Nephelograph* printed messages formed of fog, such as haikus written by children from l'école Paul Langevin in Palaiseau that were then deformed and carried away by the wind.



Nephelograph (Mist Impressions), Nuit Blanche, Paris, France.
Video Excerpt (1m 50s)): https://vimeo.com/463534837

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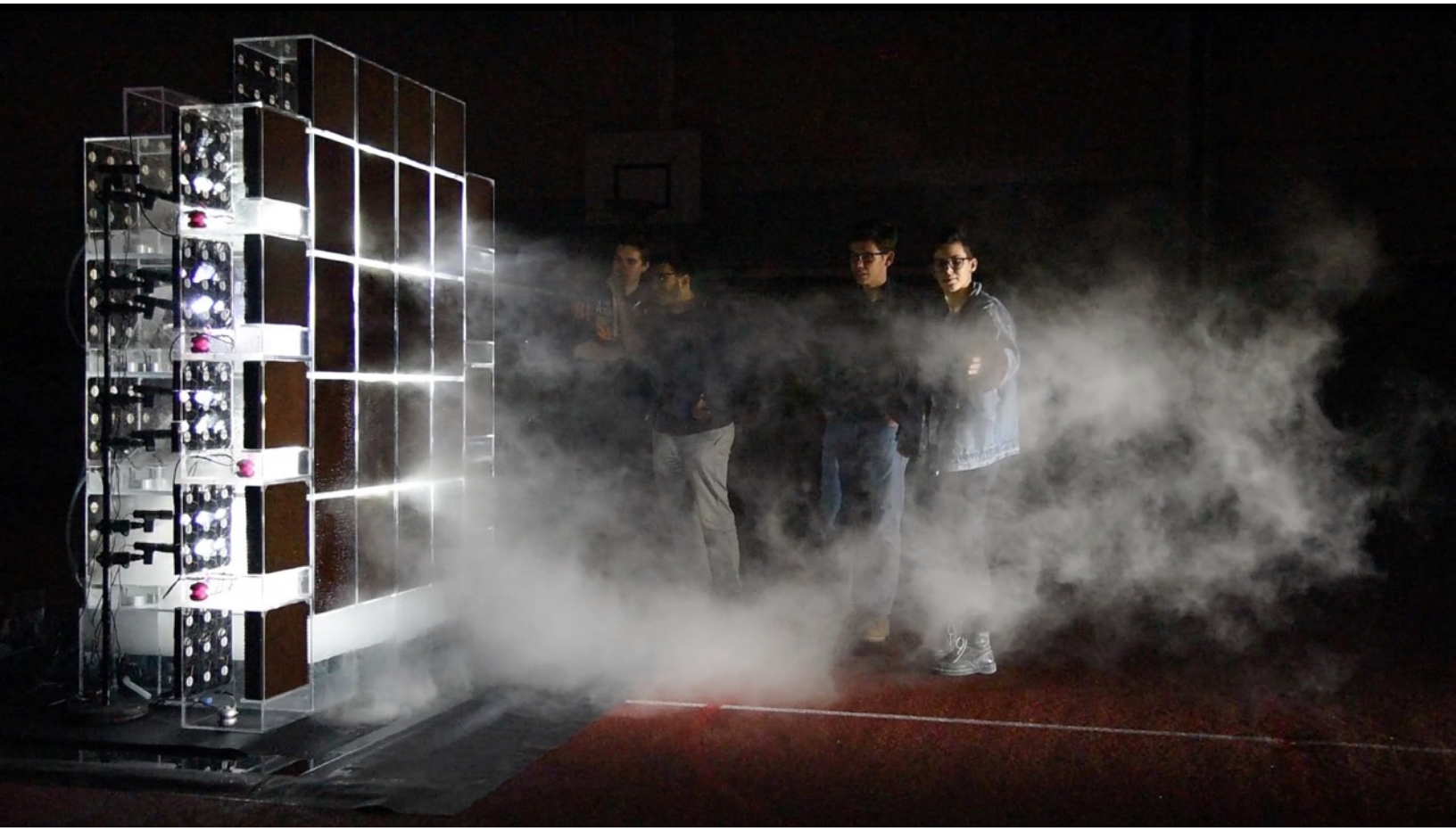
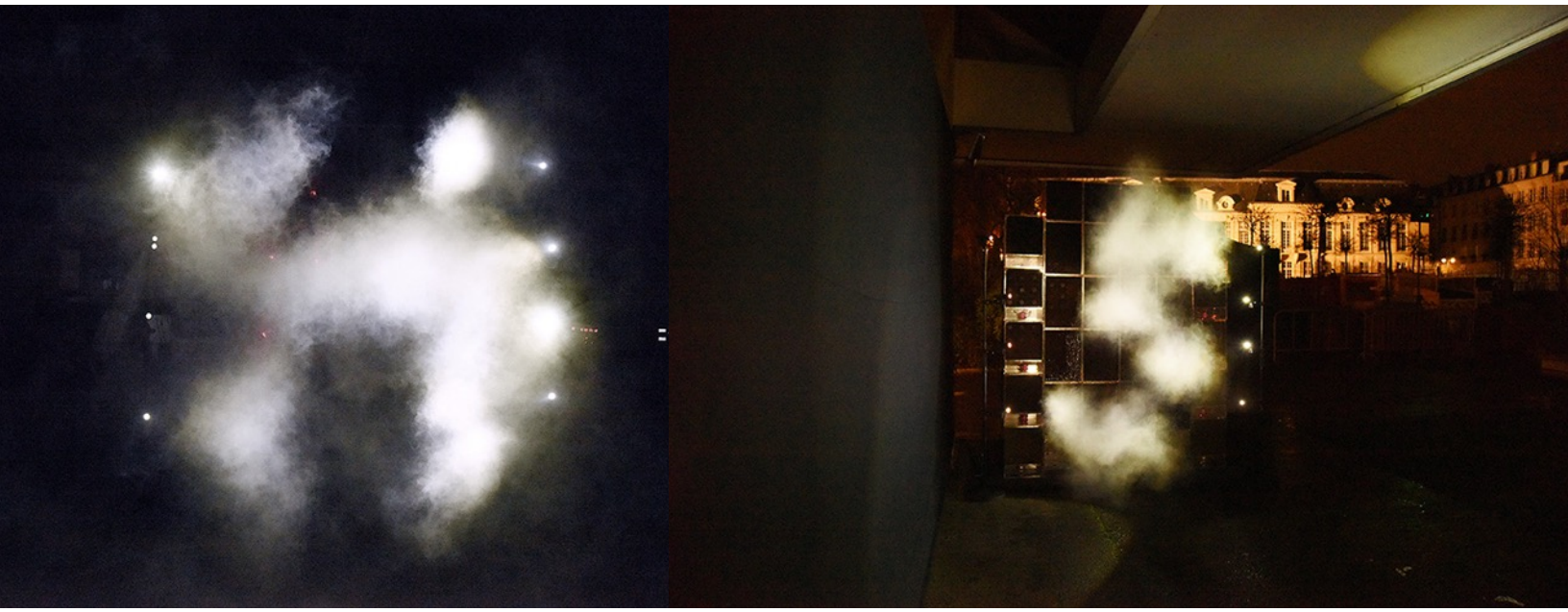


Nephelograph (Mist Impressions), Nuit Blanche, Paris, France.



Nephelograph (Mist Impressions), Cité internationale des arts, Paris, France.

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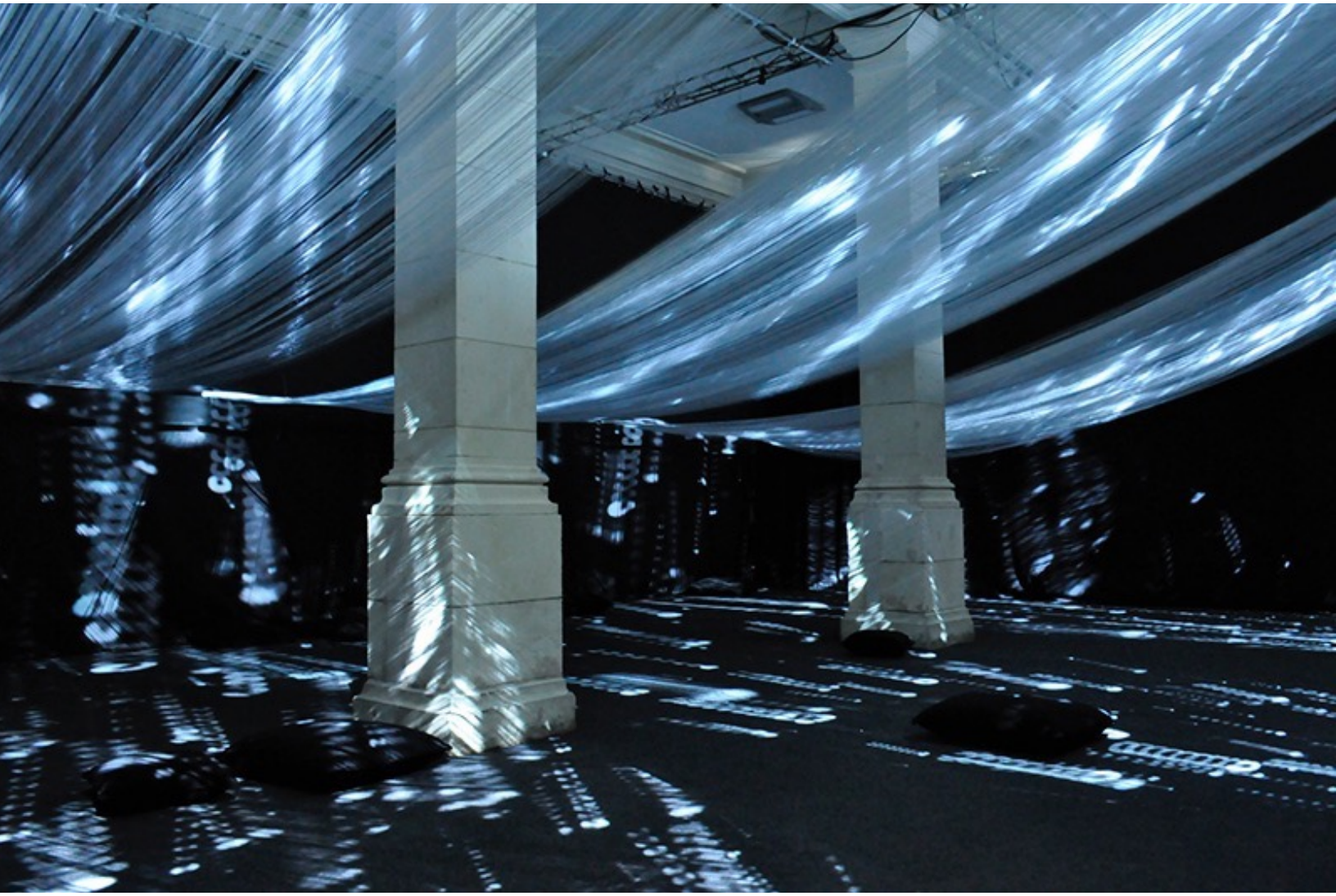
Misty Way **(2016/2020)** reconstructs the environment of capturing fog water with a textile net of parallel fibres. In this installation, water/light droplets of various sizes (captured with a fast camera at high magnification) are projected onto multiple screens made from parallel fibres, vibrating in the wind of ventilators. One hundred and twenty kilometres of thread, walked and stretched one by one, creates an inclined surface, which captures the light drops that pass along and through the 'textile', casting a second projection on the floor covered in dark carpet. They literally splash on the spectator and on the floor creating an immersive environment where viewers are submerged in a 'virtual' mist of widely spattered drops of light, shadows and sound (specifically composed for the installation by Daniel Schorno - electronic music



Misty Way, Centre Intermondes, La Rochelle, France. Video Excerpt (2m 30s): **https://vimeo.com/211308766**

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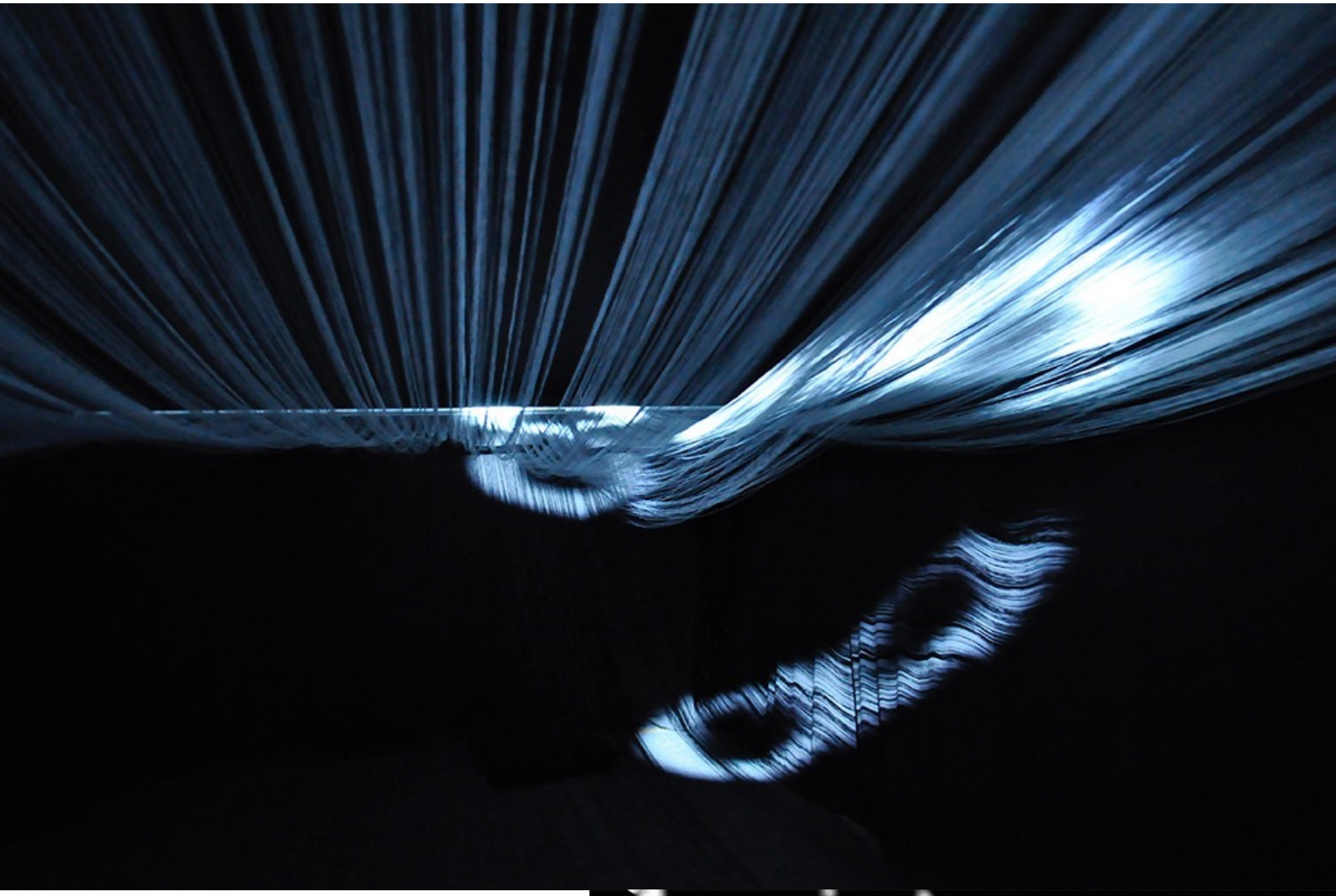

Misty Way - Installation detail and video still of water light droplets.

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Through the Looking Mist…
Centre Intermondes, La Rochelle, France.
Video Excerpt (2 min):
https://vimeo.com/258962626

Through the looking mist… is a large video projection of water droplet nucleation on parallel fibres in slow motion. Through a change of spatio-temporal scale, visitors are able to see drops slowly appearing, growing and then falling. This change of scale invites the spectator to question her/his point of view and to feel the phenomenon at the scale of a constitutive fog droplet, similar to the heroine of Alice in Wonderland, whose body proportions vary depending on different notions of space. This sensation allows the viewer to see, explore and discover the world at a different scale, where importance does not depend on size, but on the balance of forces. In the video, a growing tension, the anthropocentric feeling of resignation facing the ineluctable, gives rise to different formations and various rhythms, creating an 'ode' to the cycle of emergence and disappearance.

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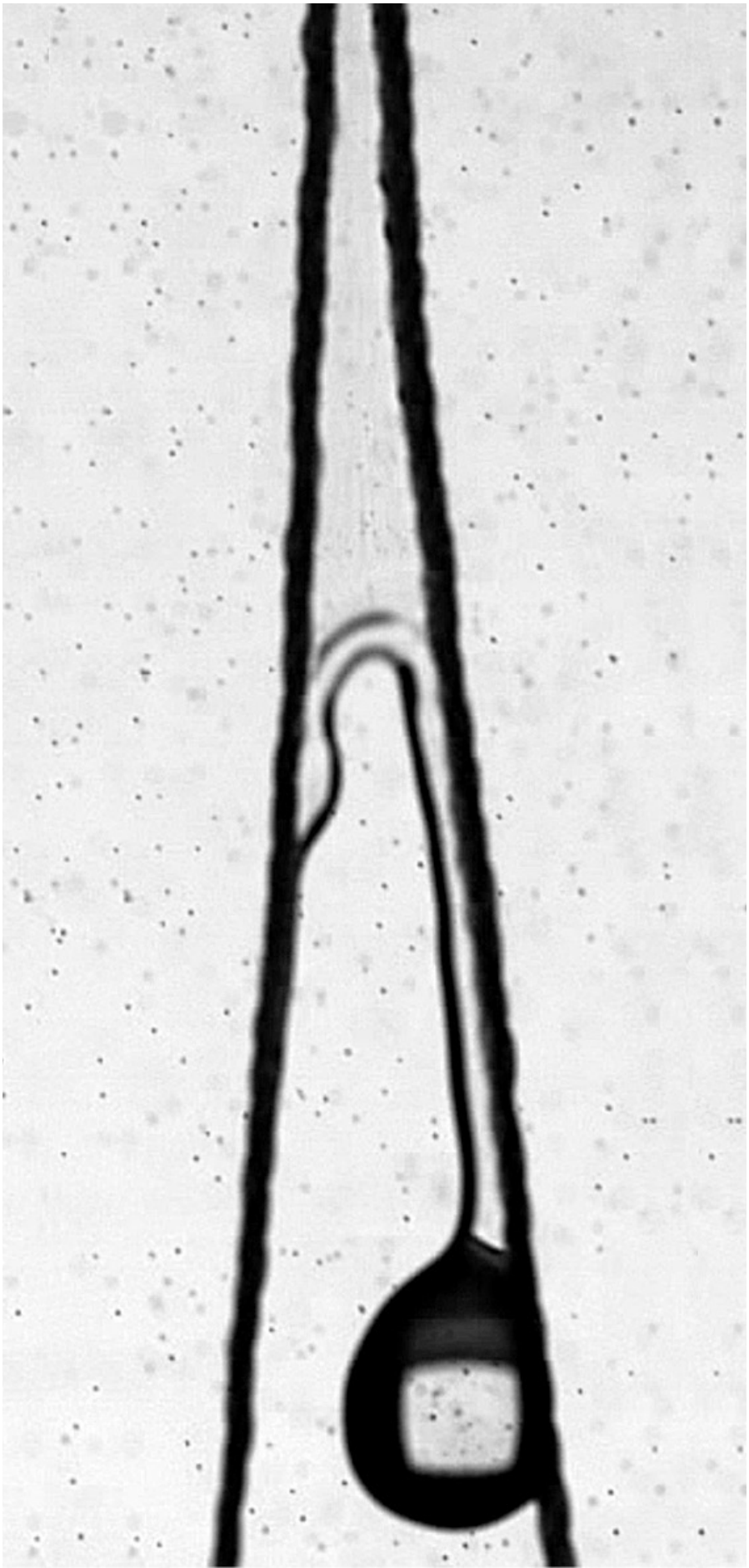

Through the Looking Mist…
Video Still - detail of triangulated threads with water film and droplet in between

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Porous Sail Prototype

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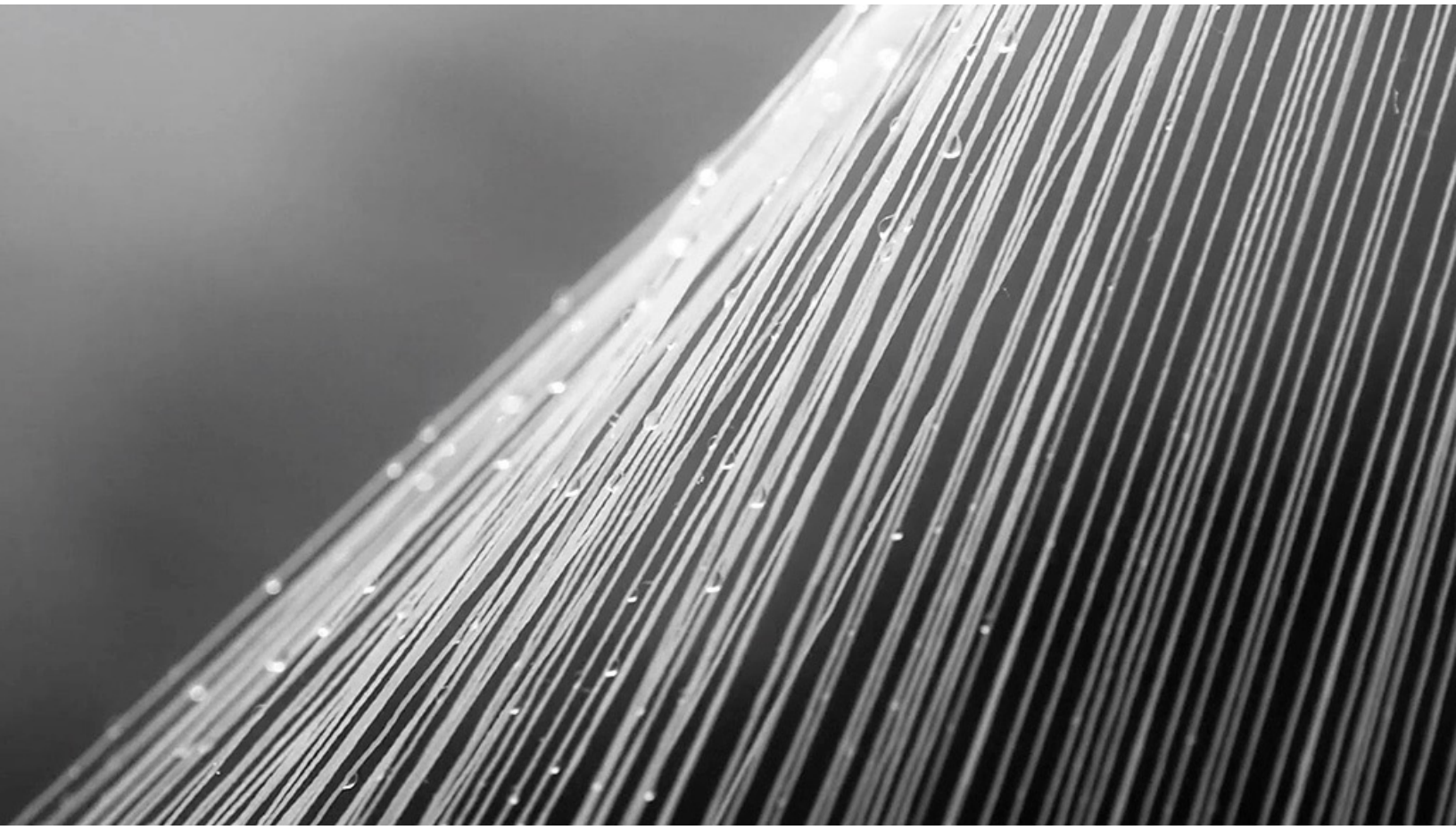
Porous Sail Prototype is a prototype of a new aerodynamic structure used to collect fog water, thanks to the modification of the geometry (ruled surfaces) and use of parallel and flexible wires. Wind is an important factor in the recovery of fog water, as small fog droplets coalesce into larger droplets when they hit a substrate. However, when the surface becomes too solid (like a net clogged with water drops), the wind perceives it as an obstacle and goes around it, which slows down the collecting process. Instead of fighting the wind, we decided to 'sail with the wind' without opposing it, stretching the surface of conventional fabrics until only warp thread remained. These are the porous sails!



Water collection on the Porous Sail Prototype. Video Excerpt (6s): **https://vimeo.com/238372340**