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## THE ARTS

# Interactive tech artist Rafael Lozano-Hemmer coming to SFMOMA



by **WILL JARRETT**  
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*Sphere Packing Bach* by Rafael Lozano-Hemmer. Photo courtesy of San Francisco Museum of Modern Art

When you step into Rafael Lozano-Hemmer's exhibition *Unstable Presence* at San Francisco's Museum of Modern Art, a huge projected screen looms above you. Massive, strange questions flash across the screen slightly too fast to grasp.

"Do many bleed?"

"What is the clearest way to perturb new politics?"

“Why shouldn’t we care for the general good?”

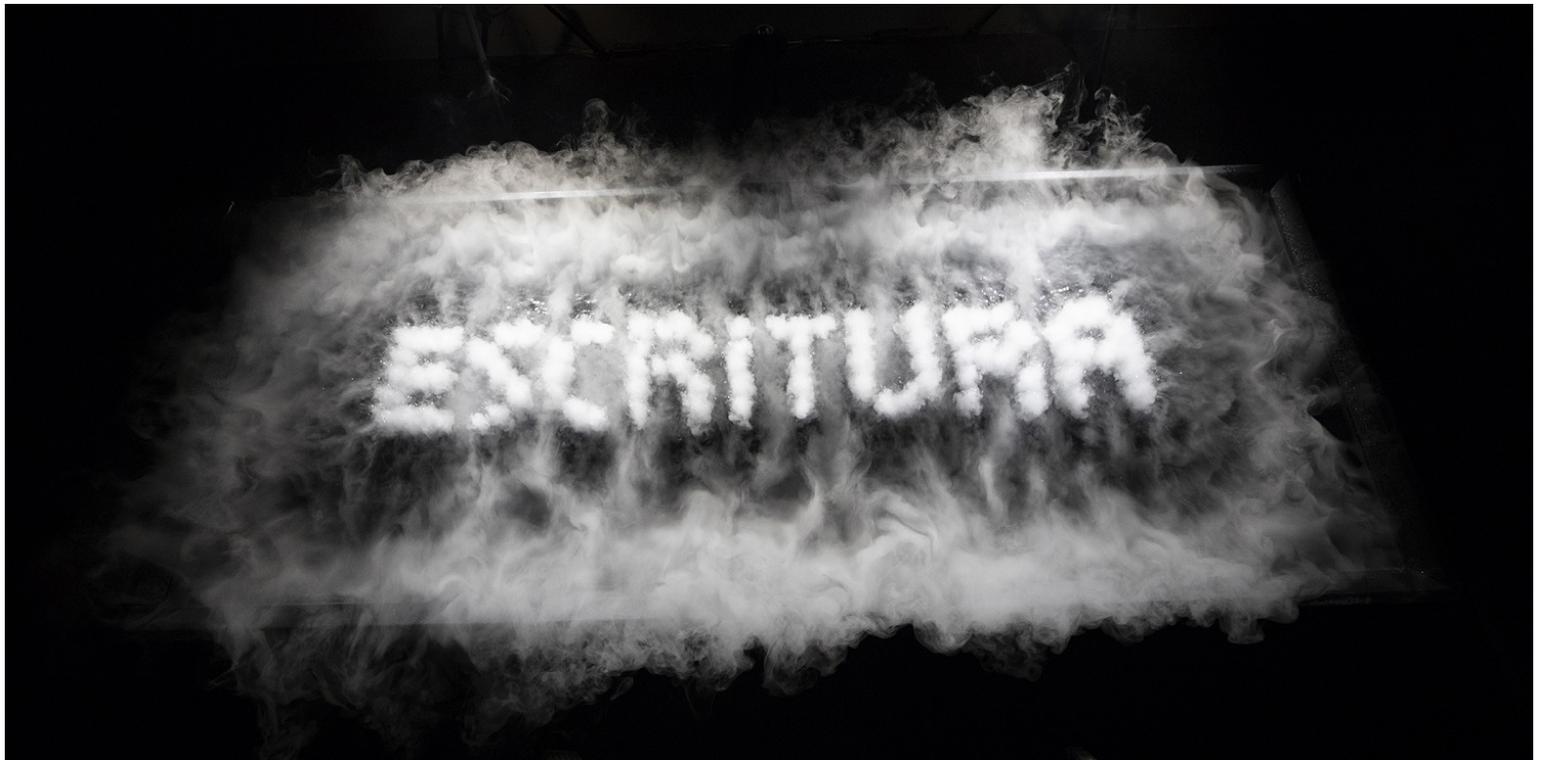
The questions are generated by a computer that has consumed a dictionary and a handful of grammatical rules. With those raw materials, it can create any of 55 billion possible questions, which it ticks through at a steady pace of 33 questions per minute — incidentally, that’s the title of the artwork. Left alone, Lozano-Hemmer assures us, it would run for thousands of years.

And there is a twist: the public can add their own questions online, in realtime. With enough participants, questions from people and questions from the computer become indistinguishable.

This element of public participation makes *33 Questions Per Minute* a fitting introduction to Lozano-Hemmer’s work. “He is one of the most exciting artists working in the field today,” said Rudolf Frieling, curator of media arts at the museum.

The 53-year-old Mexican-Canadian artist is best known for his vast interactive pieces. He was behind the **light display** at the 2010 Toronto Olympics, which saw robotic searchlights controlled by people on the internet. His 2008 **piece** for the 40th anniversary of the 1968 student massacre in Tlatelolco, Mexico, involved broadcasting the uncensored voices of members of the public across citywide radio. Now, Lozano-Hemmer is in San Francisco showing off seven of his smaller works.

The show, which opens this Saturday and will run until March 6, 2022, includes a human exhalation captured and frozen with lasers, a poem transcribed in water vapor, and a walk-in sphere with a thousand speakers blasting Bach. Admission will be included with the price of entry to the museum.



*Call on Water* by Rafael Lozano-Hemmer. Photo courtesy of San Francisco Museum of Modern Art.

Lozano-Hemmer's art is the product of many years of effort and many collaborations. As well as working alongside other artists, he has teamed up with several university departments to create technologically impressive works of art.

“The era of the lone artist with his canvas — that era is not exactly over, but it's not what we do,” he said.

With Cornell University's NanoScale Facility, for instance, he created copies of Charles Babbage pamphlets on gold flakes so tiny that 2000 could fit on a grain of sand. Then — without telling the curator, he confided mischievously — he blew a pinch of the gold dust into the museum's ventilation, so that visitors would inhale it.

This kind of playful collaboration, not only with experts but also with his audience, is what makes Lozano-Hemmer's art stand out from the crowd. Indeed, some pieces only explode into life when lots of people are involved.

As the gaggle of journalists at the pre-showing filed out of the exhibition, a small line of text at the top of the *33 Questions Per Minute* screen read: “There are 0 participants asking questions.” With the exhibition not yet open to the public, no humans were adding questions to mingle with the computer's. To fully appreciate this, I thought, I'll just have to come back again.