William Forsythe, the maverick ballet choreographer, wants to wake people up to the way they move. The Institute of Contemporary Art’s “William Forsythe: Choreographic Objects,” opening Oct. 31, features interactive installations, sculptures, and video projections that will make you dart, weave, and tremble.

“Bill often says you have to move in order to know,” says the ICA’s chief curator, Eva Respini. “He talks about the body as a thinking tool.”

Drawing is a way of thinking; so is writing. Moving in space can be just as enlightening.

Try this at home. It’s one of Forsythe’s simpler works, “Instructions.”

“Tapping the thumb and index finger of the right hand together, say ‘point’ aloud. Let your fingertips remain in contact while repeating the action with your left hand, and say ‘point’ aloud again. Now move the closed fingertips (points) of both hands to the left and right, while saying ‘line.’ Move the two points in any direction desired, at any distance from each other, to reposition or rescale your line.”
I laughed out loud when I got to “line.” The movements were utterly familiar, but Forsythe’s overlay of a simple spatial concept imbues them with meaning, the way a clever riddle subverts the ordinary into something new.

Respini encountered Forsythe’s “The Fact of Matter” at the 2009 Venice Biennale. It invites participants to cross the gallery via dozens of gymnastic rings hanging at different heights. The curator found the installation, which she is bringing to the ICA, more challenging than she expected.

“There’s an inherent failure in it,” she says of Forsythe’s art. “His work is about inviting the viewer to learn through trial and error.”

Another piece, “Nowhere and Everywhere at the Same Time, No. 3” features a maze of 80 small pendulums swinging at different beats. Participants are asked to navigate the maze without touching a pendulum. You may have to dash, leap, or sidestep. Being hit won’t hurt you, but it may complicate the rhythms of the pendulums.

“We start to pay attention to them, and we start to learn,” says Respini.

“Your reflexes become a lively choreography of avoiding the pendulum with unconscious, everyday movements that become quite beautiful.”

Forsythe has been turning classical ballet inside out for more than 40 years. He is now in the midst of a long-term residency with the Boston Ballet. In March, the troupe’s “Full on Forsythe” will debut the choreographer’s first world premiere on an American company in more than 20 years.

His installations and sculptures spring from the way he choreographs, pushing dancers to think on their feet. Even ballet dancers, who strive for technical perfection, can be rote about their movements. Boston Ballet’s artistic director, Mikko Nissinen, says Forsythe short-circuits that kind of approach, developing his dances using “structured improvisation.”

“Often, [dancers] are told exactly what to do. Bill asks them to think about what to do and take it to the next level,” Nissinen says. “It’s scary for a dancer to do.”

In “Choreographic Objects,” dancers in Forsythe’s video “Alignigung 2” perform a structured improvisation: Two wildly flexible dancers tie themselves in a knot, and incrementally thread themselves into the negative spaces their bodies create. The title blends the English word “align” with German words for “alone” and “agreement.” It is one of the rare pieces in the show that is not interactive.

Respini says some of the works in “Choreographic Objects” began as pieces made for trained dancers. The pendulum piece was conceived for, and performed by, one dancer, Brock Labrenz in 2005. Now viewers can see how he felt.

“Choreographic Objects” follows in what is becoming a tradition of dance-themed exhibitions at the ICA, starting with 2011’s “Dance/Draw” (which included a piece by Forsythe) and including “Leap Before You Look: Black Mountain College 1933-1957” (2015-16). It’s part of a larger,
social media-driven trend demanding participatory fun in museum programming, but it may also be a reaction against a world in which people inhabit their devices more and their bodies less.

Respini sees Forsythe’s objects as an antidote to that.

“Once you encounter them, they are so intuitive. Dig deeper, and they can be generative for the viewer,” she says, then she corrects herself. “Or the participant. The viewer completes the work.”

And it’s fun, too. Kids will take to the more challenging works as if they were on a playground, but not all the pieces require agility. “Towards the Diagnostic Gaze” simply entails picking up a feather duster. Respini anticipates participants to be — shall we say, moved?

“It will knock their socks off,” she says.