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Art & Science duality in Fluid Mechanics

JEAN-MARC CHOMAZ, LADHYX, Ecole Polytechnique, Paris

The connections between Art & Science is analysed through examples of my research both in Fluid Mechanics and in Art & Science. Working as a member of the artist group Labofactory and collaborating with more than twenty different artists, I have been exploring for more than twenty-four years a path between art and science that mixes both scientific and artistic imaginations. Formulating questions in science is pure imagination and intuition that does not involve only the sensible side of the brain but the sensitive side, which is able to be non incremental, to understand faster and anticipate. Instead of showing scientific proof or technique, it is possible with Art & Science to directly attempt to share this sensitive side. I will show ten recent installations that involve vortex rings, tornado generators, music propagated in shallow layers, wave tanks used as silent soft drums, boundary layer on a rotating sphere to question climate change, plum ever evolving over a nuclear plan in an water tank, a bubbly fountain in microfluidic... Two installations on the thermohaline circulation staged in a stratified tank and on the generation of earthquake are part of the exhibit “LOST IN FATHOMS” with the artist Anaïs Tondeur from 17 October until 29 November 2014 at the GV Art gallery, London. These pieces are like writing poems using fluid mechanics and by doing so re-interrogating our scientific practice and the societal role of science. They symmetrize the relation with the public that involve not only “outreach” but “inreach” or sharing.