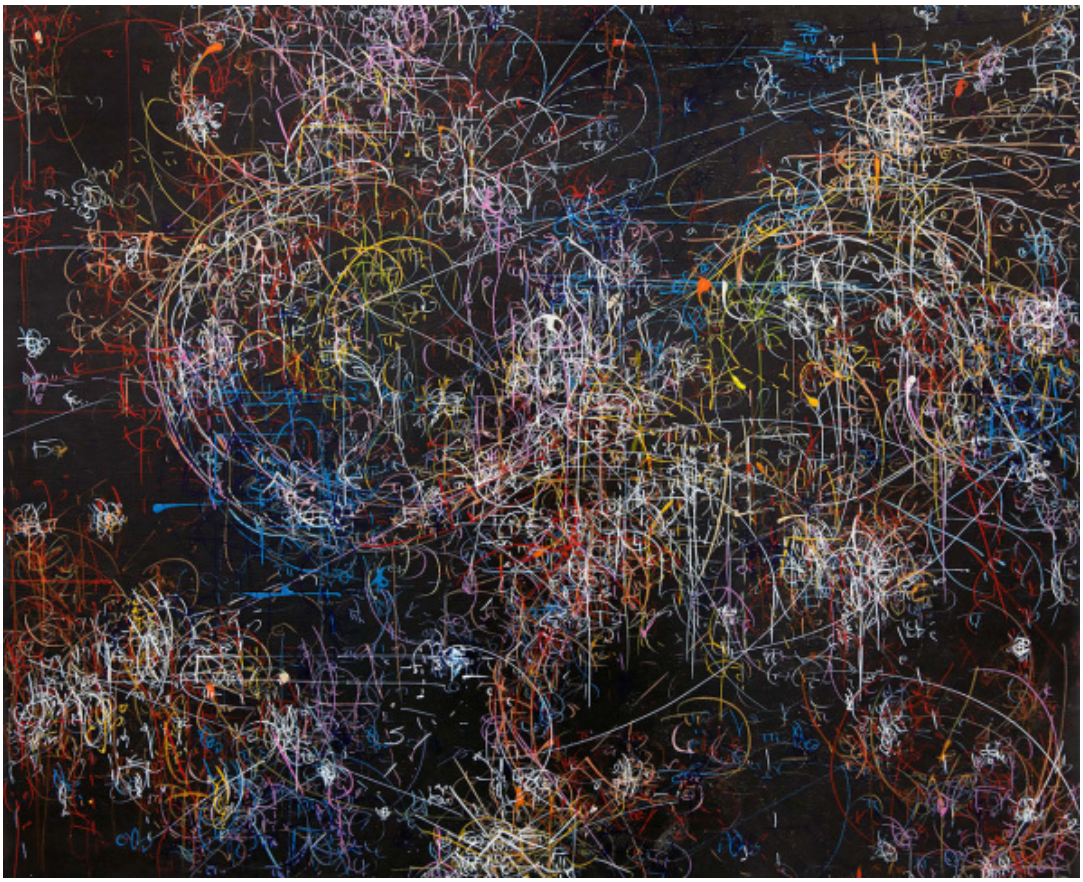
MORGAN LEHMAN
534 West 24th Street, New York, New York 10011

Co.DESIGN

This Artist Uses Subatomic Particles To Paint The Cosmos

By Meg Miller on July 24, 2017

Kysa Johnson illustrates astronomical phenomena with minuscule patterns.



blow up 279 – the long goodbye – subatomic decay patterns and the Orion Nebula, 2015. [Image: Kysa Johnson/courtesy Von Lintel Gallery]

At first glance, the ink-on-board drawings, which make up a current show called *As Above, So Below* at Von Lintel Gallery in Los Angeles, resemble neither of the things they are said to represent. They look more like colorful explosions of lines and figures against a black background—maybe fireworks in a night's sky, or maniacally scribbled equations on a blackboard. But Johnson's work is incredibly scientific and precise. She is replicating the patterns made by subatomic particles as they decay.

In particle physics, decay looks like this: one particular particle (a so-called "mother particle") disappears and is replaced by two or more decay particles (also known as "daughter particles"). Those can turn into "granddaughter particles" and so on and so on. As these unstable particles morph into stable ones, they make patterns of movements, almost like a play-by-play diagram you'd see in a basketball game. The "tracks" that these particles make have been recorded by physicists studying the phenomena for decades.

Johnson takes these patterns and layers them to illustrate other natural phenomena: the patterns that star clusters and nebula make in the sky. Her work takes the microscopic and morphs it into the telescopic.