"Next I want to make a doorbell that sounds like a dying star," says Katie Paterson. The 28-year-old artist has built a reputation for bringing science into her work. While studying for her master's at London's Slade School of Fine Art in 2007, she transposed Beethoven's Moonlight Sonata into Morse code, then bounced it off the Moon as a radio wave.

Fed into a self playing piano, the score returned in a fractured state -- she likes to think the missing notes are still adrift in space. Last December she set up an installation on Kent's Deal Pier in which street lamps flickered in time with lightning at places such as the North Pole.

Now, as the first artist in residence at University College London's Department of Physics & Astronomy, Paterson is creating a photo archive that shows the universe all along its 13.7-billion-year history. The images vary minutely -- the silver gelatine prints are embossed with handwritten coordinates and dates -- yet millennia separate them. "I like the idea of flattening this limitless, unknowable space into something as outdated as a family slide show," she says. The collection will be shown later this year at Seoul's PKM gallery.

She had previously (with the aid of Nasa and an army of back-garden supernova hunters) laser-etched a map of all 27,000 known dead stars. "There are many kinds," she explains, "and they die in different ways. My favourite is type 1b -- it explodes as brightly as a billion suns."