

Optically Induced Events and Other Art by Carolyn Ellingson

Randy Ellingson



Optically Induced Zeeman Coherence in a Single Quantum Dot

Carolyn Ellingson, 2000 Oil on canvas 48" h x 72" w An artist who loved color, design and visual impact, Carolyn Ellingson held many concepts of spectral optics in high regard. Her artwork is filled with vivid, abstract images. Although Carolyn did not completely avoid art that depicts a specific and recognizable scene, she far preferred nonrepresentational works that lend themselves to varying interpretations from different viewers.



Optically Induced Event, IX

Carolyn Ellingson, 2000

Monotype
plate size 8" square

s an ultrafast laser spectroscopist, I frequently attend scientific meetings in San Francisco. For many years, these conferences allowed me to visit often with my mother, the artist Carolyn Ellingson, who lived there from 1983 until she passed away in spring 2002. Carolyn had begun her serious pursuit of an artistic career in the mid-1970s in Minneapolis.

Carolyn continuously developed new ideas for interesting titles to her artwork, which she chose carefully in order to stimulate the creative process and encourage the viewer to explore and learn about our world. She sought out and used the finest materials for creating her colors, including cadmium reds, greens, and yellows, chrome green, cobalt blues, iridescent and opalescent paints, and even fluorescent acrylics intended for display under black light.

Optically Induced Event, IX, the piece above, is from a series of monotypes that Carolyn produced after browsing through my program book from the 2000 CLEO/QELS, which was held in San Francisco. In fact, the artist borrowed some very specific optics-related titles from that program, such as Generation of High-Order Harmonics Originated from a Single Quantum Path and Optically Induced Zeeman Coherence in a Single Quantum Dot. Some of these pieces were titled shortly after CLEO 2000, in time for her spring open studio show that year. Carolyn kept her studio at San Francisco's Hunters Point Shipyard, where open studio weekends in the spring and fall still draw large crowds of art browsers and buyers.

Carolyn's art never stopped evolving. It covers a wide variety of styles and media. Her works include acrylic and oil paintings, watercolors, pastel drawings, collages and

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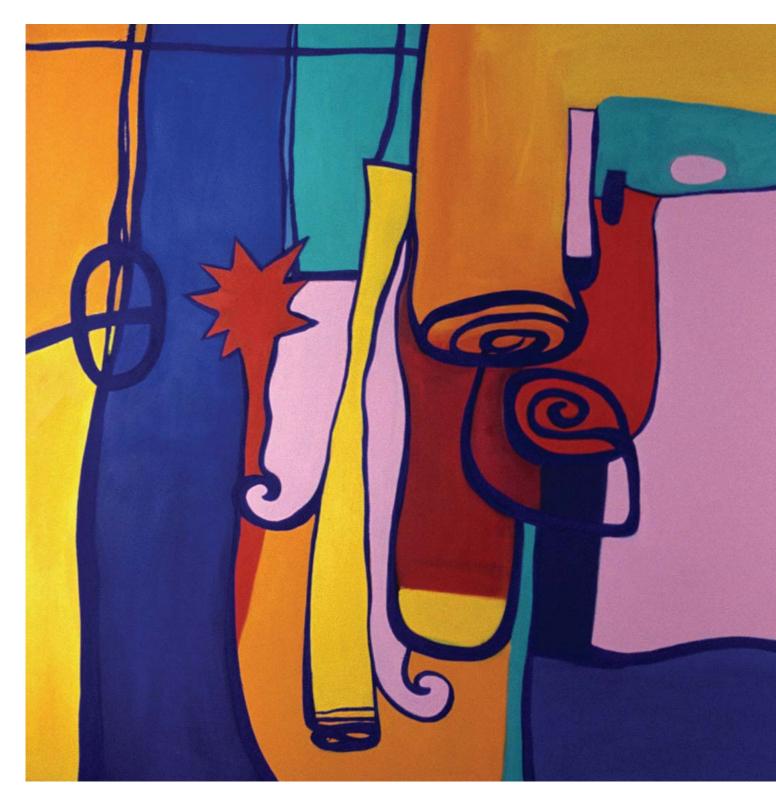


Chrome Green with Pink

Carolyn Ellingson, 2000 Monotype with painting 23" h x 34" w

Spectra Series, VIII
Carolyn Ellingson, 1993
Monotype
17.5" h x 23.5" w





prints created by the techniques of intaglio, silkscreen and smooth-plate monotype prints. She ultimately came to prefer oil paints over acrylics, owing to the colors and feel of the paints.

Intaglio refers to prints created from an etched copper plate. Once the plate has been created, the ink is worked into the grooves, where it remains after the plate's surface has been wiped clean. A piece of paper is then laid atop the inked plate

on the bed of a press. Rolling the bed under a drum applies even pressure to extract the ink onto the paper.

Unlike intaglio, monotype prints are created on a smooth plate by working the ink and/or paints to generate an image. Monotypes are also printed using a press, which generates a one-of-a-kind image each time it is used. The artist might make a series of similar images, but each is created separately and is distinct. The prints on pp. 38-39 are examples of monotypes.

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Generation of High-Order Harmonics Originating From a Single Quantum Path

Carolyn Ellingson, 2000 Oil on canvas 42" h x 72" w

Carolyn passed away in April 2002 following a ten-week illness. She died from mesothelioma, a cancer of the lung. She kept slides for many of the works she sold over the years, and her family has generated a database of images for all of her known pieces. More than 1,900 of her works from 1976 through 2001 can be searched and viewed at her Web site: www.artgroove.com. The Web site offers other artists' quotations compiled by Carolyn.

One can also view a special series of watercolors that is based on the artist's thoughts and feelings about the September 11, 2001, terrorist attacks. Visitors may subscribe to an opt-in newsletter with updates related to the artist's life and her art. \mathbb{A}

[In addition to being one of the artist's three sons, Randy Ellingson (Randy_Ellingson@nrel.gov) is a senior scientist in the Center for Basic Sciences at the National Renewable Energy Laboratory (NREL) in Golden, Colo.]