

MANFRED MOHR  
Pioneer of Algorithmic Art

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Simons Center for Geometry and Physics  
Stony Brook University, NY

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September 10 - November 12, 2015

Simons Center Gallery  
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# MANFRED MOHR

## Pioneer of Algorithmic Art

Born in 1938 in Pforzheim, Germany, Manfred Mohr began his career as a jazz musician and action painter. In the early 1960's, his art was radically transformed after an introduction to the German philosopher and author Max Bense's information aesthetics. Bense's concepts redirected Mohr's artistic pursuits from abstract expressionism toward an enduring aesthetic inquiry based on computer-generated algorithmic geometry.

The computer music composer Pierre Barbaud further inspired Mohr and encouraged him to cofound the seminar "Art et Informatique" at the University of Vincennes (University of Paris VIII) in 1968. It was here in 1969 that Mohr wrote his first FORTRAN program on an old computer the university acquired. There was no plotter so Mohr executed his drawings by hand from computer printed output.

It was also in 1969 that Peter Kemmey, an American physicist from Long Island's Brookhaven National Laboratory (BNL), travelled to Paris to visit Estarose Wolfson, a friend and former colleague from BNL. There he met Mohr, Wolfson's lifelong partner. Intrigued by Mohr's ideas, Kemmey ran the artist's FORTRAN IV code on BNL's then supercomputer, which had a high-resolution computer output microfilm plotter. A remarkable innovation at the time, it was capable of printing black and white images instantly on light-sensitive, glossy photo paper. Mohr's revolutionary work was thus realized for the first time as digital drawings.

In the same year, Mohr's first plotter drawings were generated on paper using a Zuse flatbed plotter at Germany's University of Darmstadt. During this time, Mohr also discovered the Meteorological Institute in Paris had attained an automatic Benson flatbed plotter and CDC computer, which filled an entire room at the institute. As an aspiring young artist with fresh ideas, Mohr was given special permission to create drawings utilizing the plotter. Applying FORTRAN IV programming, Mohr continued to pursue his groundbreaking algorithmic work in computer art.

Mohr established himself as an internationally exhibiting artist while living in Paris in the 1960's. His first major museum exhibition, "Une Esthétique Programmée," was at the Musée d'Art Moderne de la Ville

de Paris in 1971. This highly regarded historical exhibit is known as the first solo museum show of artwork drawn by a digital computer, and Mohr presented to the public his generative computer drawings executed via a flatbed plotter for the first time.

Since 1973, the algorithmic rhythm found in Mohr's cubes and hypercubes, and the relationships of the lines within, are integral to the artist's vision. Generative geometry, logic, and mathematics are all fundamental to his remarkable work. Observing a rational synthesis of logical and precise methods, Mohr programs his art with an aesthetic objectivity that results in a "clearer image of the creator's thinking and intentions."<sup>1</sup>

Today, Mohr is a leading and internationally revered pioneer of digital art. Solo and retrospectives of his work are exhibited worldwide. Mohr's prestigious awards include the 2013 ACM SIGGRAPH Distinguished Artist Award for Lifetime Achievement in Digital Art, the 2006 Digital Art Award Cologne/Berlin, a fellowship from New York Foundation for the Arts (1997), the esteemed 1990 Golden Nica from Ars Electronica in Linz, the 1990 Camille Graeser Prize in Zürich and the 1973 Ljubljana Print Biennial, amongst many other accolades.

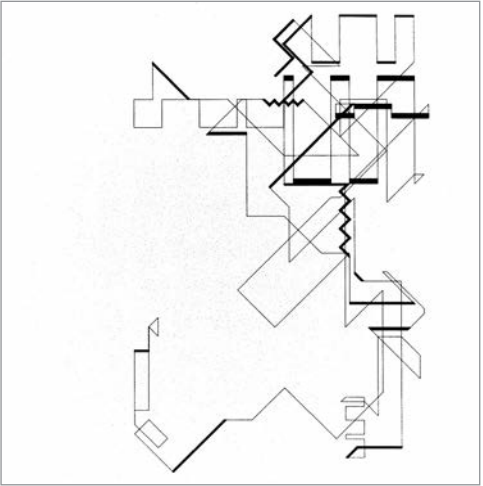
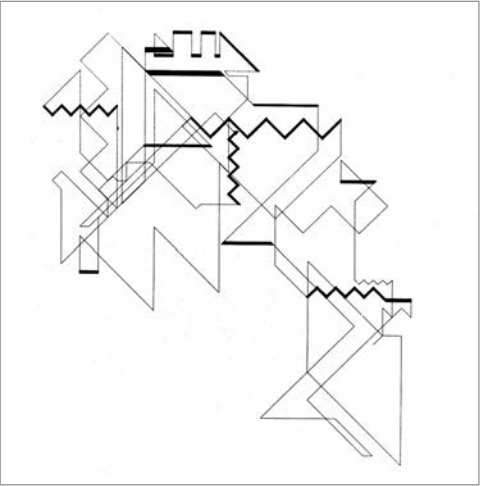
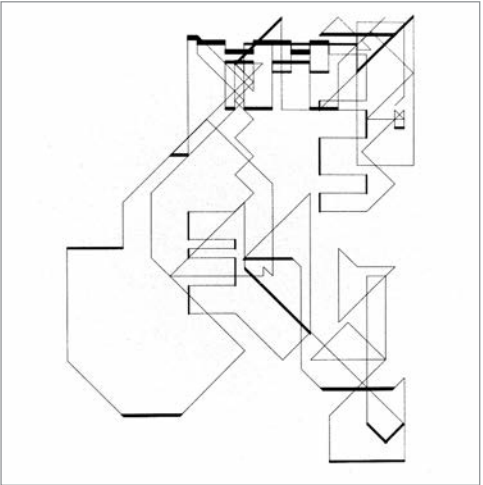
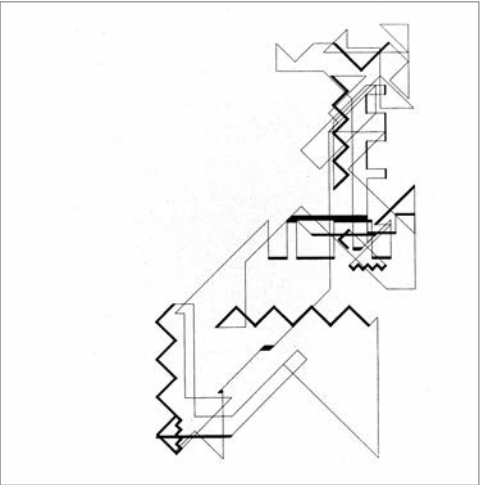
The Simons Center Gallery is honored to exhibit Manfred Mohr's work at Stony Brook. Notably, included in this exhibition are Mohr's early digital drawings executed at Brookhaven National Laboratory in 1969. It is a great privilege to share this important historical art with all at Stony Brook University and the community at large.

Lorraine Walsh

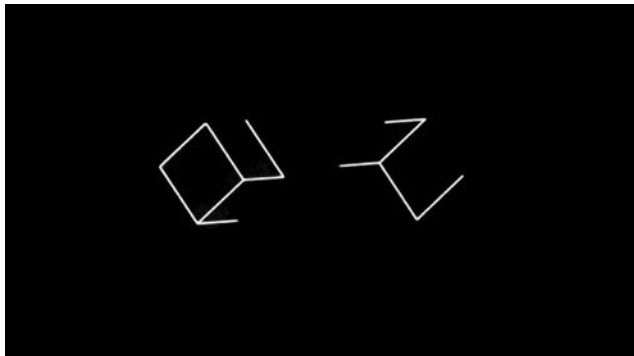
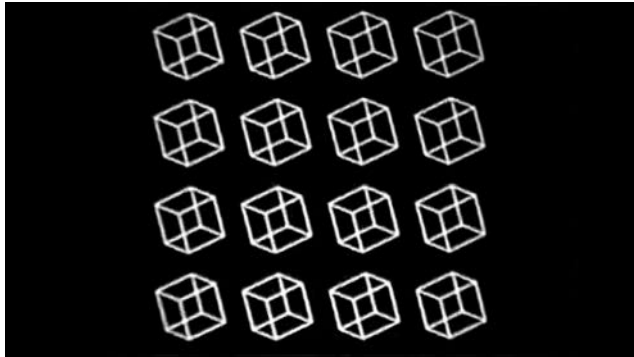
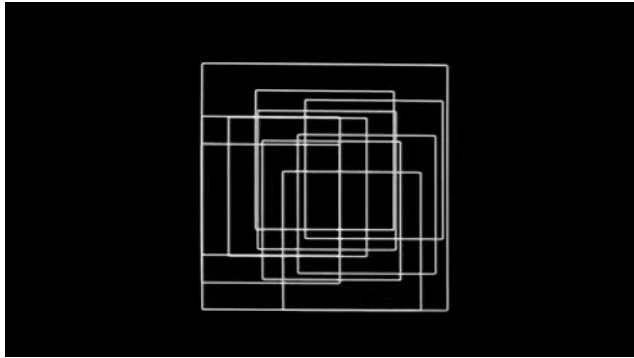
Art Director and Curator, Simons Center for Geometry and Physics

Visiting Associate Professor of Art, Stony Brook University

1. Manfred Mohr, "Manfred Mohr," in *Artist and Computer*, ed. Ruth Leavitt (New York: Harmony Books, 1976)



*P-018-mf*, 1969  
High resolution computer output print on glossy photo paper  
4.7 x 4.7" (12 x12 cm) each  
Courtesy Anne and Michael Spalter Digital Art Collection



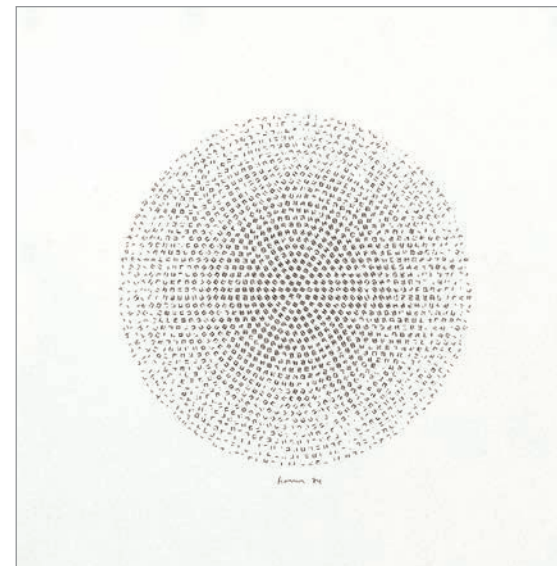
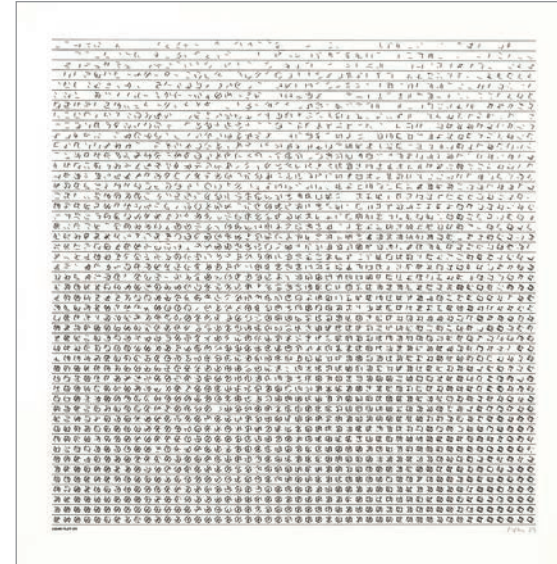
*Square Roots*, 1972-1973  
Still from digital transfer of 16 mm film, black and white, silent; 3:47 min.  
Courtesy the artist and bitforms gallery, New York

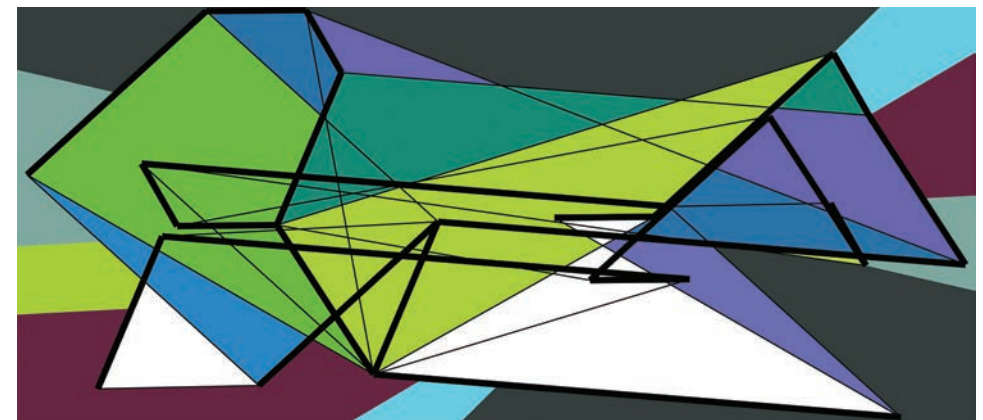
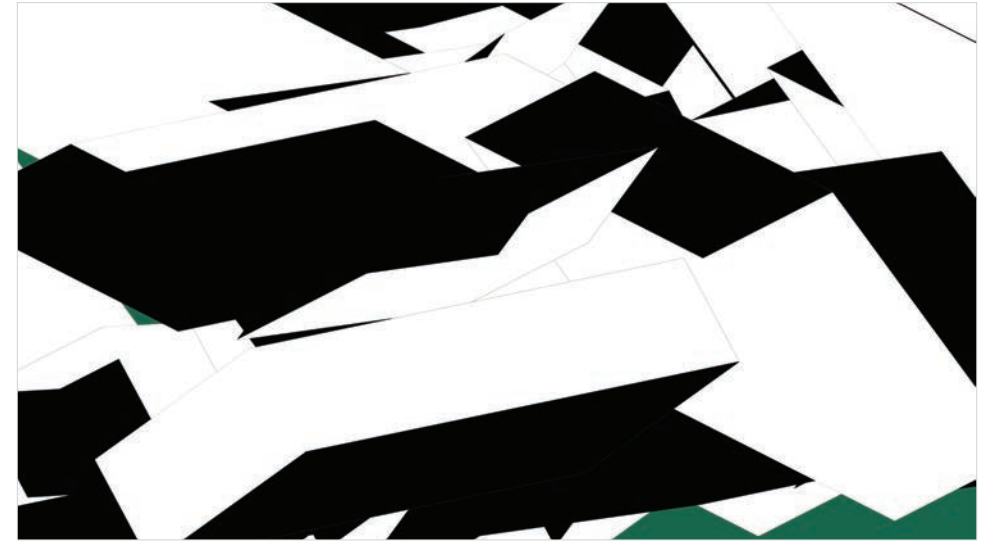
*Cubic Limit*, 1973-1974  
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*Complimentary Cubes*, 1973-1974  
Still from digital transfer of 16 mm film, black and white, silent; 5:39 min.  
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P-155-B1, 1974  
Plotter drawing ink on paper  
19.7 x 19.7" (50 x 50 cm)  
Courtesy the artist and bitforms gallery, New York

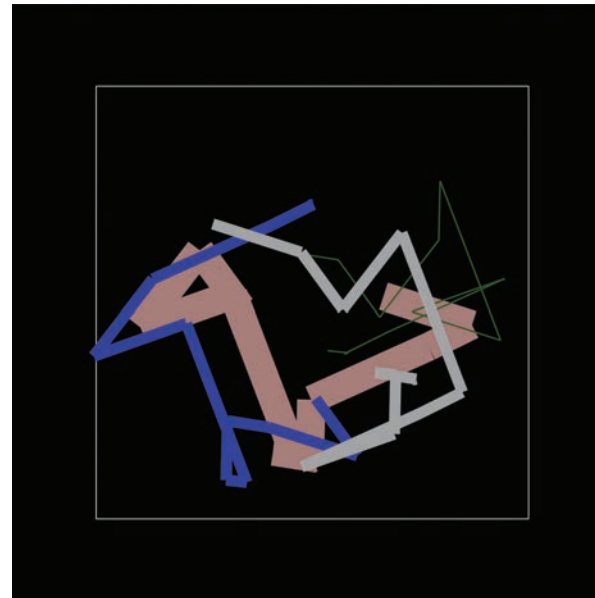
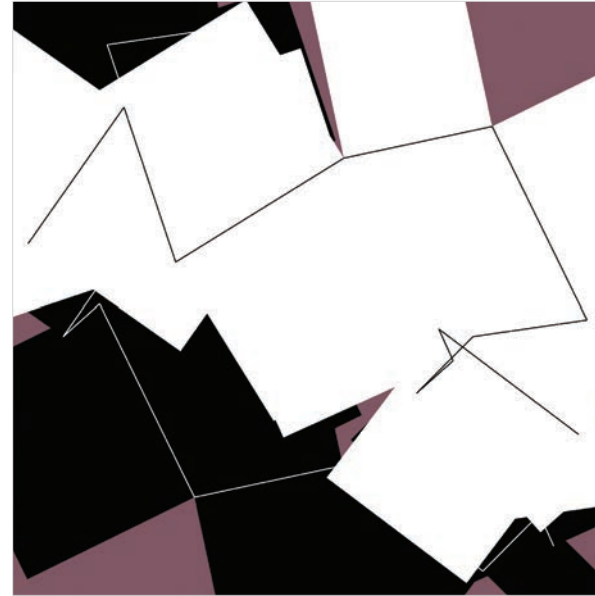
P-156/1 Rund, 1974  
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*P1011, subsets.motion, 2004*  
Still from computer-generated real time algorithmic animation  
LCD screen, computer, custom software  
Screen: 18 x 14 x 4" (46 x 35 x 10 cm)  
Courtesy the artist and bitforms gallery, New York

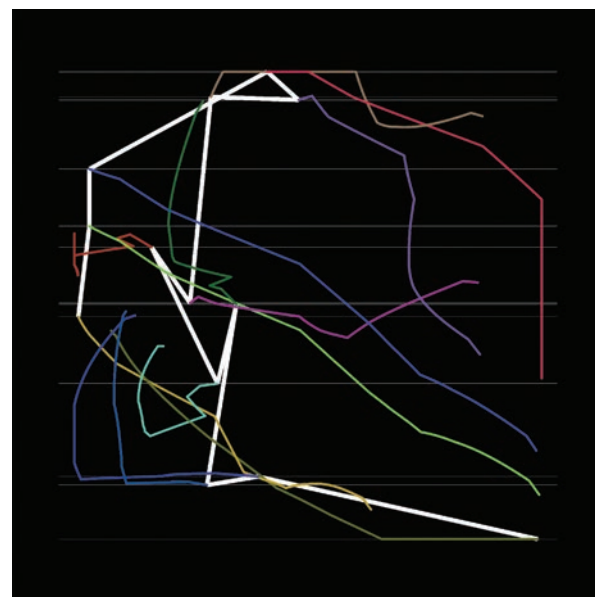
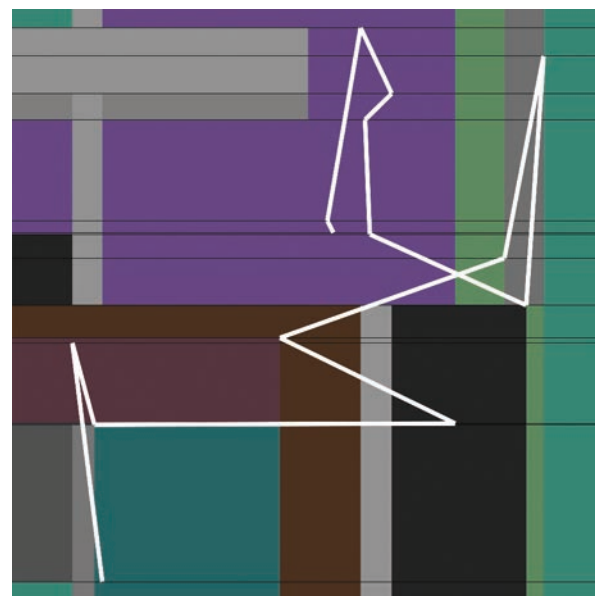
*P777, space.color.motion, 1999-2001*  
Still from computer-generated real time algorithmic animation  
LCD screen, computer, custom software  
Screen: 14 x 18 x 4" (35 x 46 x 10 cm)  
Courtesy the artist and bitforms gallery, New York



*P1411-H, parallelResonance, 2009-2011*  
Still from computer-generated real time algorithmic animation  
LCD screen, computer, custom software  
Screen: 17.7 x 17.7 x 4.3" (45 x 45 x 11 cm)  
Courtesy the artist and bitforms gallery, New York

*P1271, klangfarben, 2008*  
Still from computer-generated real time algorithmic animation  
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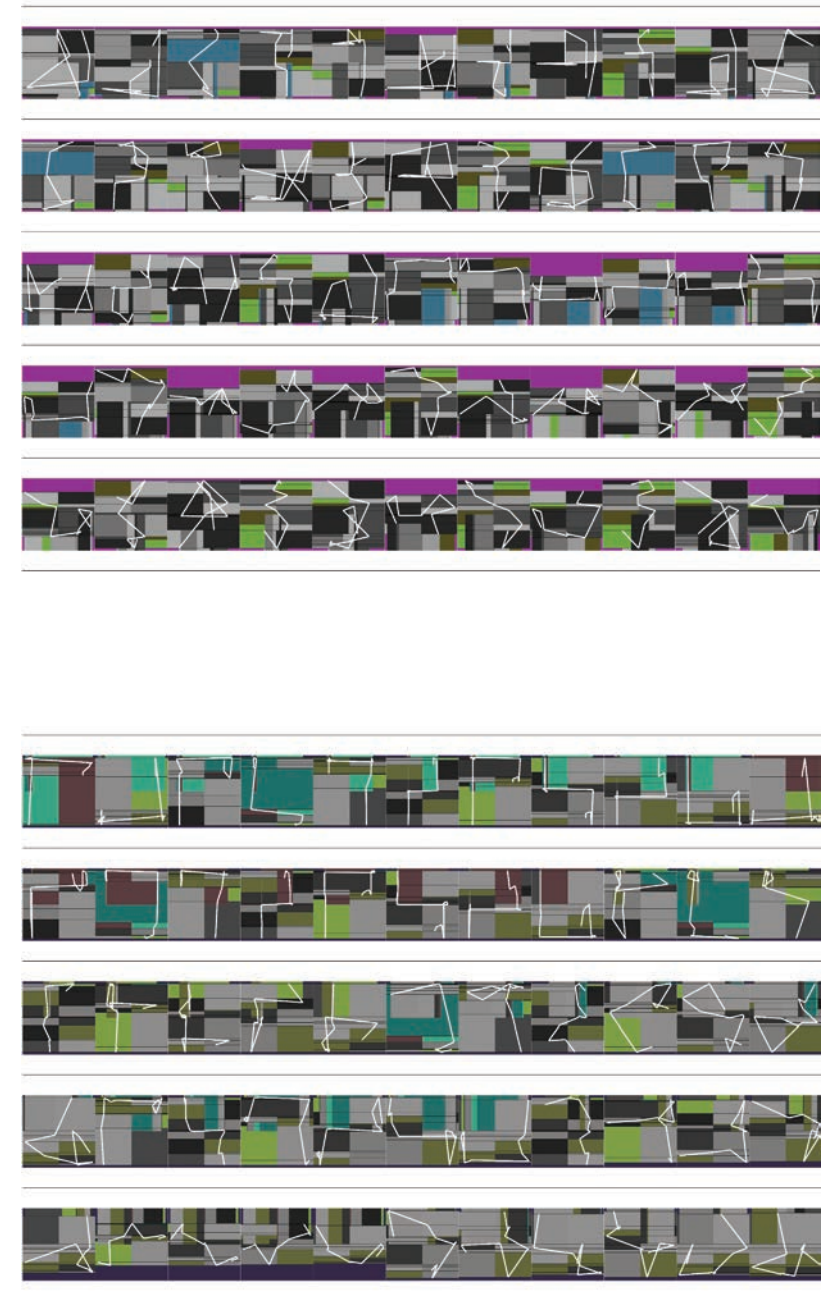


*P1622-G, artificata II – baseline, 2012-2013*  
Still from computer-generated real time algorithmic animation  
LCD screen, computer, custom software  
Screen: 17.7 x 17.7 x 4.3" (45 x 45 x 11 cm)  
Courtesy the artist and bitforms gallery, New York

*P2210, artificata II – traces, 2014*  
Still related to computer-generated real time algorithmic animation  
LCD screen, computer, custom software  
Screen: 18 x 26 x 4.3" (45 x 65 x 11 cm)  
Courtesy the artist and bitforms gallery, New York

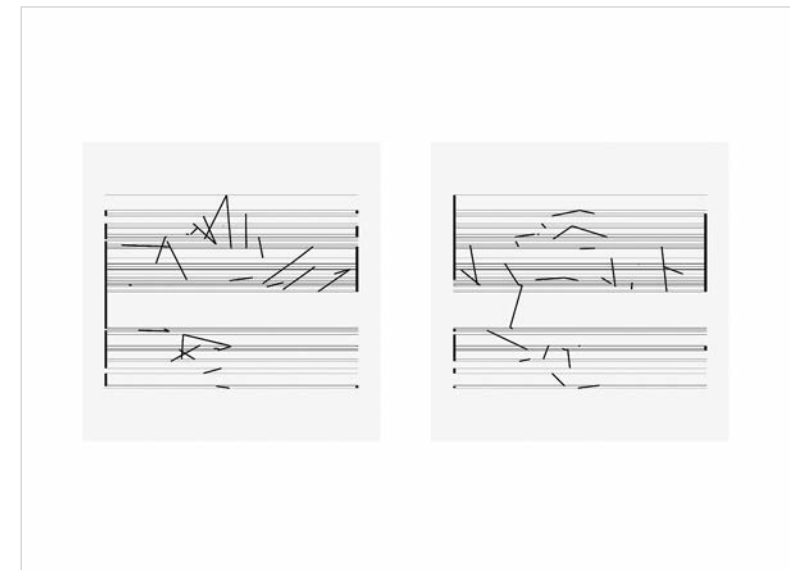
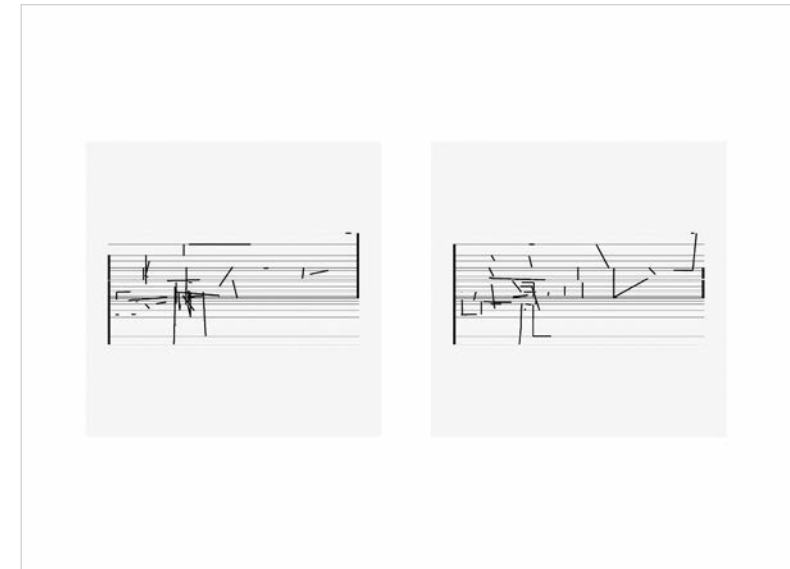
*P-1640\_581*, 2014  
Pigment-ink on paper  
59 x 44" (150 x 112 cm)  
Courtesy the artist and bitforms gallery, New York

*P-1640\_506*, 2014  
Pigment-ink on paper  
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*P-1682\_1884*, 2014  
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22 x 15.7" (56 x 40 cm)  
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*P-1682\_108*, 2014  
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algorithmic animation  
Displayed on hyperwall  
Courtesy the artist and  
bitforms gallery, New York

*P1640, artificiata II -  
projections and  
dimensions*, 2014-2015  
Excerpt from a computer-  
generated real time  
algorithmic animation  
Displayed on hyperwall  
Courtesy the artist and  
bitforms gallery, New York

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*P-1682\_108*, 2014  
Pigment-ink on paper  
22 x 15.7" (56 x 40 cm)  
Courtesy the artist and  
bitforms gallery, New York

*P1682-A, artificiata II -  
parity*, 2015  
A computer-generated real  
time algorithmic animation  
LCD screen, computer,  
custom software  
Screen: 25.6 x 17.7 x 4.3"  
(65 x 45cm x 11 cm)  
Courtesy the artist and  
bitforms gallery, New York

## MANFRED MOHR

Pioneer of Algorithmic Art

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September 10 – November 12, 2015

### SCHEDULE OF EVENTS

**Opening Reception**  
Thursday, September 10, 2015  
5:00 pm, Simons Center Gallery

**Artist talk**  
*From Rhythm to Algorithm*  
4:00 pm, SCGP Room 103

**Wine and Cheese Reception**  
5:00 pm, Simons Center Gallery

**Closing Reception**  
Thursday, November 12, 2015  
5:00 pm, Simons Center Gallery

## ACKNOWLEDGMENTS

I'd like to express my gratitude to all at the Simons Center for Geometry and Physics, especially to John Morgan, Director; Elyce Winters, Chief Administrator; Tim Young, Systems Administrator; and to staff members Teresa DePace, Joshua Klein, Jason May, Janell Rodgers and Brianne Schmidt. Thanks also to Tony Phillips, Art Advisory Committee Chair and the entire art committee; Barbara Frank, Art Department Chair; Anne and Michael Spalter; Steven Sacks, bitforms gallery; and assistants Joo Yun Lee and Katherine Schwarting.

Finally, a special thanks to the artist Manfred Mohr and to Estarose Wolfson. It is an honor to exhibit this exemplary artwork to share with Stony Brook University and the community at large.

Lorraine Walsh  
Art Director and Curator

All lectures and receptions are free and open to the public

Simons Center Gallery Hours  
Monday – Friday 10:00 am – 5:00 pm  
Closed Saturday, Sunday, and Holidays

Directions: Simons Center for Geometry and Physics  
<http://scgp.stonybrook.edu/about/directions>

Information: <http://scgp.stonybrook.edu> or call 631-632-2800

Catalog Design: [macomea@optonline.net](mailto:macomea@optonline.net)



SIMONSCENTER  
FOR GEOMETRY AND PHYSICS



Stony Brook  
University



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