Purpose :

- Explore Polynomiography in education
- Introduce unique visual software
- Examine lesson plans that integrate Polynomiography
- Experiment with demo software

Features :

- Introducing Polynomiography
- Activities for classroom use
- Viewing an art exhibit
- Access to computer and advanced demo software
- Networking with presenters and participants
- Take home demo Polynomiography software
- Prizes for creative work during lab session

Connections to NJ Math Standards :

- Approximation of square and cube roots
- Visualization of quadratic and cubic equations
- Integration of algebraic and geometric concepts

Registration Information :

Registration Fee: \$50.00 (includes continental breakfast, lunch, certificate of completion, demo software)

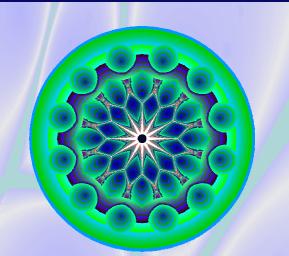
Registration deadline is May 8, 2007.

For registration information, please contact Ruth at (732) 445-3632 ext. 147. For workshop content information, please contact Dr. Bahman Kalantari at <u>kalantari@cs.rutgers.edu</u> and type "*Polynomiography Workshop*" in the heading.

*Workshop is limited to 50 participants

Polynomiography

A Creative Visual Medium for Art, Math, and Education



A Unique Workshop for Middle and High School Educators

Discovering the Beauty of Math Through Polynomiography and its Software

www.polynomiography.com

May 15, 2007

Location:

Center for Advanced Infrastructure and Transportation Rutgers University 100 Brett Road, Piscataway, NJ 08854

RUTGERS

Co-Sponsors:

New Jersey Statewide Systemic Initiative

(NJ SSI)

&

Center for Advanced Infrastructure

Transportation (CAIT)

Polynomiography is the mathematics and imagery of visualizing polynomial equations

"Over the centuries, mathematicians have developed a variety of methods of solving equations. Bahman Kalantari of Rutgers University has developed visualization software that brings the process of finding the roots of a polynomial equation into the realm of design and art." Ivars Peterson, Science News

"Lose your fear of math with computer graphics that displays the beauty and symmetry hidden within algebraic equations." **Discover Magazine**

Workshop Organizers and Presenters:

- Dr. Deborah H. Cook, NJ SSI Director
- Dr. Ali Maher, CAIT Director
- Dr. Bahman Kalantari, Department of Computer Science, Rutgers University
- Dr. Iraj Kalantari, Department of Mathematics, Western Illinois University
- Dr. Fedor Andreev, Department of Mathematics, Western Illinois University

Workshop Details:

8:00 am Registration & Continental Breakfast
8:30 am Morning Session
12:00 pm Lunch
1:00 pm Afternoon Session
3:30 Adjourn

REGISTRATION FORM

Polynomiography Workshop

Full Name

Title

Organization

Address

City, State, Postal Code

Phone

Fax

E-mail

Signature

Payment enclosed (\$50.00):

____ voucher

____ check

Please make payable to:

Rutgers, the State University of NJ

CAIT C/O NJ LTAP 100 Brett Road PISCATAWAY, NJ 08854 ATTN: RUTH FAX: (732) 445-5636 PHONE: (732) 445-3632 ext. 147 Register online at: www.ltap.rutgers.edu/training

Directions to the Center for Advanced Infrastructure and Transportation (CAIT):

FROM THE NEW JERSEY TURNPIKE

Take Exit 9 and follow the signs for Route 18 North- New Brunswick. Take Route 18 North to Exit for Campus Road/Busch Campus/Rutgers Stadium. Follow Campus Road until it hits the traffic circle. Make the 1st Right (immediately after entering circle) onto Bartholomew Road (you will be along the right side of the recreation center). At the first intersection make a Left onto Brett Road. Make the next Right onto Bowser Road. Make the last Left into the parking lot; the CAIT is on the far left side of the parking lot.

From Route 1 North or South

Take the Exit for Route 18 North and follow the directions above.

FROM THE GARDEN STATE PARKWAY NORTH

Take Exit 105 and follow signs for Route 18 North, New Brunswick. Pass the NJ Turnpike Entrance and proceed with the directions above for the NJ Turnpike.

FROM THE GARDEN STATE PARKWAY SOUTH

Take Exit 129 for the New Jersey Turnpike and travel south. Follow the directions from above.

