

For a calendar of technical society meetings in the Mid-Hudson Valley go to:
<https://pok.acm.org/community.html>

Poughkeepsie Chapter of the Association For Computing Machinery



```
      aaa          ccccccc      mmmmmmm  mmmmmmm
      a  a          cc      cc      mm mm  mm mm
      aa  aa        cc      c      mm mm mm mm
      aaaaaaaaaa    cc          mm  mmm  mm
      aa  aa        cc      c      mm  m  mm  MEETING NOTICE
      aa  aa        cc      cc      mm          mm
      aa  aa        cccccccc      mm          mm  Free and open to the public
```



Topic: Why Elementary Math Education Continues to Fail and How We Can Fix It

Speaker: Dr. Irvin M. Miller

When: Monday, March 18th, 2019, 7:30 pm

Where: Marist College, **Hancock Center, Room 2023**

Directions: Building 14 on the map at <http://www.marist.edu/about/map.html>

Parking: Please park at black dot #10 on <http://www.marist.edu/about/map.html> (the lot North of the Hancock Center #14) or in the lot on the South-East corner of Route 9 & Fulton St. (S/E of the former Main Entrance).

About the Topic: Human beings learn through hypothesizing explanations for observed patterns until they find a simple explanation that can be tested and validated. We should be interested in how someone discovered what we are being taught and question why the process we are being taught works. Fractions are a simple example in which we are told a process without explaining the process. Few people even know the definition of a fraction! Manipulatives are highly touted, but are merely the application of mathematics to a particular problem. Number structure blocks rather than explains, leaving many other explanations in waiting. The popular rote process limits us to applying what we are taught. Doing hexadecimal arithmetic operations becomes very easy if you understand addition and multiplication rather than memorizing a table. By teaching the way the mind is designed to learn, we can teach fifth graders college level math to a better level of understanding than college students have. I know this from experience.

About the Speaker: Dr. Miller has a Bachelor of Engineering Science in Electrical Engineering and a Ph.D. in physics from Johns Hopkins University. He is director of the Math and Physics Exploration Center in LaGrange, NY. The article: "Computer Graphics for Decision Making" published in Harvard Business Review in 1969 established him as a leader in computer graphics, resulting in an invitation to the First European Management Symposium in Davos, Switzerland. He also developed an exhibit for the New York Stock Exchange Visitors Center. He has taught graphics and physics in education classes at IBM, computer graphics at Vassar College, math to teachers at SUNY New Paltz, and currently teaches enriched math courses for forth, fifth, and sixth graders in the Wappingers and Arlington Central School districts. Students from Highland, Carmel, Hyde Park, and Spackenkill come to the Exploration Center for enriched math instruction. Each year the Exploration Center has a math recognition event on PI day for top math students.

Cost: Our meeting is **Free** and open to the public

Dinner: 6:00 pm, Palace Diner, 845.473.1576
Map and menu: www.thepalacediner.com
All are welcome to join us for dinner

We thank Marist College for hosting the chapter's meetings.

P - L - E - A - S - E P - O - S - T

This page is available on the web at <https://pok.acm.org>.

