The Mathematics and Computer Information Sciences Department State University of New York College at Old Westbury

Dedicates

The Twenty-Sixth Annual

LIMAÇC

Long Island Mathematics Conference

in memory of Dr. Jong Pil Lee

Friday, March 16, 2012, from 7:45 A.M. to 2:35 P.M. at SUNY College at Old Westbury Campus Center

> Dr. Ewing's keynote address, Who Owns the Common Core Standards?, will be followed by a daylong series of sessions and workshops focused on mathematics education, pedagogy, and problem solving. Presenters and participants alike can expect the sessions to provide ideas, techniques, and skills that help improve teaching and content effectiveness, and recharge batteries.

Co-sponsored by: The Nassau County

Mathematics Teachers'

The Suffolk County Mathematics Teachers'

The Nassau County Association of Mathematics

Association of Teachers of Mathematics of New York

and partially funded by a grant from NYS Depart-

ment of Education

Association

Association

Supervisors

FOR CALCULATOR SESSIONS, PLEASE BRING YOUR OWN. ON-SITE REGISTRATION WILL BE ACCEPTED ON A LIMITED BASIS (\$10 ADDITIONAL FEE). NO CONFIRMATION WILL BE SENT.

ANY QUESTIONS? CALL RONNI DAVID, 516-359-2794 OR MIMI SCHNIER, 516-876-3261



opportunities for professional interactions and offers a forum for the exchange of concerns, innovative ideas, and achievable goals. The year's theme is "Math: Getting to the Core."

The 2012 keynote speaker is Dr. John Ewing, President of Math for America. Previously, he was the Executive Director of the American Mathematical Society for nearly 14 years. The AMS, with 33,000 members, is the world's largest mathematics research society and a major research publisher. Dr. Ewing was professor of mathematics at Indiana University from 1973-1995, where he also served as department chair. He has held visiting positions in the mathematics departments of Dartmouth College, the University of Virginia, Newcastle University (England), and Göttingen University (Germany). Dr. Ewing has received several national exposition awards for both his writing and editing and is a Fellow of AAAS

SCHEDULE FOR THE LONG ISLAND MATHEMATICS CONFERENCE

7:45 - 8:30 CHECK-IN, CONTINENTAL BREAKFAST and VENDOR BOOTHS - Campus Center

8:45 - 9:15 INTRODUCTION by L.I. Mathematics Conference Board

9:15 - 10:15 KEYNOTE ADDRESS by Dr. John Ewing, President of Math for America

10:30 - 2:35 SESSION A-D see below

BUFFET LUNCHEON during either Session B or C

VENDOR BOOTH times 7:45 - 8:30 and 11:20 - 1:45

(Participants select three of the numbered 1 through 15.)		sions
A Potpourri of Math Joanne Lufrano Valley Stream District #30	K-2	Working With the Common Core, a High School Perspective Heidi Bromley NYSAMS Vice-President 9-12
Math Talk! Mickey Jo Sobierajski AMTNYS Past President	K-4	11 Mathematical Paradoxes Mike Riccardo Bayside HS-NYC DOE 9-12
Developing Number Sen- Teaching Fractions With Lei and Area Models Dr. Irina Lyublinskaya Professor, CUNY/College of State Island	ngth	Making Indelible Images With the Geometer's Sketchpad. Gene Eyshinskiy Assistant Principal, Flushing HS/NYC
Using Your SMART Boar to Achieve Common Core Standards for Math Matt Ringh Tequipment, Inc.	d 5-8	13 Teaching AP® Calculus with WeBWork® Judy Broadwin Baruch College II,I2, College
5 Hands-on Geometry® Paul McNamara Syosset Schools	5-8	14 Mathematical Magic Dr. Raymond N. Greenwell Professor, Hofstra University General
6 Kick Off the Year with Problem Solving Colleen Ryan AuSable Valley Middle School	5-8	15 Strategies for Job Seekers (Teachers and/or Administrators) David J. Flatley Superintendent, Carle Place Schools
Standards? What Do We With Them?		Pre-service
AMTNYS President Technology & Mathemati the Right Angle	6-8 ics:	

Frank Sobierajski Teaching Matters, Inc.

Address

School/District Represented _

9 A Colorful Approach to Pythagorean Triples & N-tuples Paul Schwiegerling Professor, Buffalo State College

6-college

SESSION B 11:35 - 12:25 Participants select three of the sessio numbered 16 through 25) or lunch	session C 12:40 - 1:30 (Participants select three of the sessions numbered 26 through 34) or lunch
16 Common Core & K-4 Mickey Jo Sobierajski AMTNYS Past President K-	26 Working With the Common Core, Common Core Perspective 4 Heidi Bromley NYSAMS Vice-President K-4
17 SMART® Math Audrey Bellovin Principal, Garden City Schools K-4	27 Using Your SMART Board to
18 Working With the Common Core an Intermediate Perspective	
Heidi Bromley NYSAMS Vice-President 5-8	Kendal Askins
19 Making Indelible Images With the Geometer's Sketchpad® Gene Eyshinskiy Assistant Principal, Flushing H.S./NYC 5-8	29 Developing Number Sense in
Mathemagic Michael Riccardo	Dr. Irina Lyublinskaya CUNY/College of Staten Island 5-8
Bayside HS-NYC DOE 7-I Teaching Algebra with TI-84 App Dr. Irina Lyublinskaya Professor, CUNY/College of Staten Island	CBL®, CBR2® and Easy Data JoAnn Miltenberg Farmingdale Schools 9-12
Using Your SMART Board to Achieve Common Core Standards for Math Matt Ringh Tequipment, Inc. 9-1	Advanced Learners David Linker Professor, CUNY/City College of New York 9-12
The Four "Means" and Geometry Applications Paul Schwiegerling	y Y Unique Math Discoveries to Enhance Your Lessons Paul Schwiegerling Professor, Buffalo State College 9-12
Professor, Buffalo State College 9-12, college	ege 33 Probability Distributions in Statistics
22 Beyond the SMART Board Notebook & Graphing Calculator Frank Sobierajski Teaching Matters, Inc. Gene	Harriet Greenspan Plainview-Old Bethpage Schools II,12, college
25 I'm Going to Be a Math Teacher Why Didn't I Know This?	
,	Jayson Kiang

SESSION D: 1:45 - 2:35 (Participants select three of the sessions numbered 35 through 49.)

	35 Subtraction and Place Value Alan Tucker Professor, SUNY/Stony Brook K-4	TI-84 Tips and Tricks for Algebra Students
		Sonja Barrera Massapequa Schools 9-12
	Jamie Piecora Patchogue-Medford Schools K-4	Problem Solving to Supplement the Curriculum Farrel Powsner
	37 Multiple Ways to Multiply	Retired, Roslyn Schools 9-12
	Claire Wiener Retired, Manhasset Schools 3-5	46 Making a Collaborative Class Work for Students and Teachers
	38 Best Resources Donna Gobin	Kate Martin-Bridge De Witt Clinton HS/NYC 9-12
	Tequipment, Inc. 5-9	Creative Problem Solving:
	39 Adventures in logic	Knowledge-Building & Deep Practice
	Thomas J. Lucas Math MindED.net 5-8	Peter G. Hayes Roslyn Public Schools 9-12, college
	Hands-On Equations: Algebra for Everyone Theresa Ziccardi Syosset Schools 5-8	Blocks Jane-Marie Wright Professor, Suffolk Community College
		General
	11 It Takes Three: Graphing Calculator/PowerPoint® Presentation/Worksheet Marianne Mancusi Retired, Rockville Centre Schools 7-9	49 What One Needs to Know Linda Carlson Pace University Pre-service
	Improving Student Performance on the AP® Stat Exam	
	Prof. Sean Simpson SUNY/Westchester Community College AP, College	
	43 Creating an Interactive Math Classroom	
е	Dana F. Morse Texas Instruments, Inc. 9-12, College	
		_

Cut here and place in envelope with check for registration fee (includes luncheon)

REGISTRATION FORM

Pre-service

LIMAÇON, Friday, March 16, 2012 at SUNY College at Old Westbury, Campus Center from 7:45 A.M. to 2:35 P.M.

Register early to insure your choice of sessions. Come early to browse the vendor displays.

Cost of Conference: Fee includes Continental Breakfast and Luncheon. (Please check one) ☐ \$50.00 for NCMTA, NCAMS, ATMNYC OR SCMTA members

□ \$60.00 for non-members ☐ Full-time students pay only \$25.00

- ON-SITE REGISTRATION WILL BE ACCEPTED ON A LIMITED BASIS (\$10 ADDITIONAL FEE)

			(F	,	
.1					
Name					

Mail form and check by March 4, 2012 to: (checks payable to: L.I. Mathematics Conference Board) Limaçon, Attn: Mimi Schnier, Mathematics and Computer Information Sciences Department, SUNY College at Old Westbury, Box 210, Old Westbury, NY 11568-0210.

Position	Grade Level

1st Choice ____ Session B or C: 1st Choice ____ Session D: 1st Choice _ Session A: #1-15 2nd Choice _____ #16-25, #26-34 2nd Choice _____ #35-49 2nd Choice ____

Molloy College

3rd Choice _____ 10:30 - 11:20 3rd Choice ____ (Lunch) 1:45 - 2:35 LUNCH MENU: You must select one of the following when you register:

- NO CONFIRMATION WILL BE SENT

- NO REFUNDS

egg salad

- BRING YOUR OWN CALCULATOR

(FOR SESSION DESCRIPTION SEE BACK OF PROGRAM)

Make copies of this form if more are needed.

1.

Chef salad (no ham)

2.

Vegan/gluten free platter (baby spinach with roasted vegetables)

3. Individual lunch platters with romaine lettuce, cucumbers, tomato, carrot sticks, new potato salad, string bean salad 🛛 tuna salad

E-mail:

. Telephone .

3rd Choice ___

chicken salad

Session A Choose

A Potpourri of Math
 Math is everywhere. Engage your students in a potpourri of activities that integrate math into the K-2 curriculum and address the CCSS.

 Math Talk!
 Ourstudents should be critical thinkers, successful problem solvers and mathematicians. The ideas, calculator games, and activities presented will encourage your students to perform at the higher levels of Bloom's Taxonomy.

3. Developing Number Sense: Teaching Fractions With Length and Area Models

How do you feel about fractions? Come and learn about different approaches you can use for teaching fractions to your students. The more ways you teach something, the better the students understand it.

4. Using Your SMART Board to Achieve Common Core Standards for Math

Gain an in-depth understanding of the collaborative features of the SMART Board interactive whiteboard. See how to implement these tools in class in support of the Common Core Standards.

5. Hands-on Geometry®
Make geometry come alive. Discover shape bubble-ology.
Build 2-D and 3-D shapes. See if 3-D shapes produce round bubbles — or something else. A fun surprise awaits all.

6. Kick Off the Year with Problem Solving
How do you start the school year? This session explores activities that help create a connected classroom through problem solving. Participants are invited to share their ideas and tips as well.

7. Standards? What Do We Do With Them? Make the standards come alive by activities that develop understanding and create fun as well.

8. Technology & Mathematics: the Right Angle Seven pieces of software + 113 digital images + levels + 29 ideas + 17 videos = 61 minutes or technology fun. = 61 minutes ofs + 5 grade s of prime

9. A Colorful Approach to Pythagorean Triples and N-tuples
A colorful way to determine Pythagorean Triples. Students will be able to determine any triple by following some simple rules. Added bonus, the work can be extended to n-tuples.

10. Working With the Common Core, a High School

Come examine the Common Core Learning Standards, compare them to the 2005 NYS performance indicators, and dig beyond to understand what it all could mean for secondary students.

11. Mathematical Paradoxes Come, see how to use paradoxes to interest students various mathematical concepts.

You will see Geometer's Sketchpad applications across the math curriculum through calculus in the classroom. No 12. Making Indelible Images With the Geometer's Sketchpad ementary students.

math curriculum through calculus in the classroom. No experience in Geometer's Sketchpad is needed. 13. Teaching AP® Calculus With WeBWorK® WeBWorK is a free online homework program for students from the MAA and NSF. It assigns to each student a different variation of each problem and grades it immediately. Monitoring homework is quick and easy.

14. Mathematical Magic
Several magic tricks based on mathematical principles will be performed. Participants will learn how to do the tricks themselves and why the tricks work, using ideas in arithmetic, algebra, number bases, and Fibonacci numbers.

15. Strategies for Job Seekers (Teachers and/or

job market remains tough. For pre-service stu-l seasoned professional alike, this workshop may pointers to help you land that job. Feel free to

B or Session 0 Choose 3

16. Common Core & K-4Mathematical practices to help implement the Common Core State Standards in mathematics (CCSSM) in the K-4

Reach all learners with exciting games on the SMART Board®! Games are ideal for integrating concrete materials, needed practice, and strong motivation. The SMART Board is ideal for facilitating the demonstration while it motivates.

18. Working With the Common Core, an Intermediate Perspective
Come examine the Common Core Learning Standards, compare them to the 2005 NYS performance indicators, and dig beyond to understand what it all means for grades 5-8

19. Making Indelible Images With the Geometer's

You will see Geometer's Sketchpad a the math curriculum in the classroom. Geometer's Sketchpad is needed. applications across n. No experience in

Mathematical reasoning explains many magic tricks we enjoyed as children. After I perform and justify some magic tricks, we'll discuss how they can motivate certain classroom topics.

21. Teaching Algebra with TI-84 Apps
Learn what is hidden under the apps button on TI-84+ calculator. We will work with several really cool applications for teaching algebra 1.

22. Using Your SMART Board to Achieve Common Core

Standards for Math
Gain an in-depth understanding of the collaborative features of the SMART Board interactive whiteboard. See how to implement these tools in class in support of the Common

square means. 23. The Four "Means" and Geometry Applications Extend your geometry lesson by including information about arithmetic, geometric, harmonic and root-mean

24. Beyond the SMART Board Notebook & Graphing Calculator

From I-Pods to cell phones, as math teachers we need to rethink how we use technology in the mathematics classroom. Come and see why.

25. I'm Going to Be a Math Teacher — Why Didn't I Know This?

These mathematical concepts and understandings are useful for future 7-12 teachers to know, but often missing from their preservice education experience. Come learn new ways to implement new ideas.

26. Working With the Common Core, Common Core
Perspective
Come examine the Common Core Learning Standards, compare them to the 2005 NYS performance indicators, and dig beyond to discuss what it all could mean for el-

27. Using Your SMART Board to Achieve Common Core Standards for Math

Gain an in-depth understanding of the collaborative features of the SMART Board interactive whiteboard. See how to implement these tools in class in support of the Common Core Standards.

28. Cutting Pi
Often we are very straightforward when we teach the Circle
Unit. This workshop will provide teachers with hands-on
discovery activities for finding circumference and area that

29. Developing Number Sense in Middle School With Technology-Based Science

Develop number sense through inquiry-based lab activities

30. Real World Applications Using the CBL®, CBR2®

and Easy Data
The CBL and CBR data collection system with the TI-84® or TI-Nspire® models real life situations involving trigonometric, exponential, step function, quadratic graphs, and more. Introduce lessons quickly with easy data probes.

32. Unique Math Discoveries to Enhance Your Lessons Area calculated like never before, the Fibonacci Sequence seen like never before, and more!

Session D Choose 3

39. Adventures in logic
This is problem solving at its best. We will solve challenging problems with a variety of thought-provoking activities, problem solving strategies, mathematical principles and, of course, a lot of logical thinking.

Jericho Turnpike.

The main entrance to the College side of Route 107 approximately

e is located on to one-half mile

40. Hands-On Equations®: Algebra for Everyone These fun manipulatives enable students in grades 3-9 to physically see basic algebra concepts and skills. Learning

Integrate algebra lessons using PowerPoint lessons, worksheets, a graphing calculator, and if time permits, some popular games. Some topics: relations/functions and solving systems of equations graphically.

See how interdisciplinary learning connects math, science, and technology. Wherever placed, these activities can enhancestudents learning and give you authentic assessment

31. Challenging Problems for Your Advanced Learners Interest and excite your advanced learners with these challenging problems. Watch clever tips and tricks simplify difficult problems. Topics will include concepts that can be expanded into research projects.

33. Probability Distributions in Statistics
The binomial distribution is discrete. The normal distribution is continuous. How do you use the normal distribution to approximate the binomial distribution? (bring your ti-83/84 calculators).

34. Mapping for Success in Mathematics
Aligning the curriculum vertically and horizontally results in improved student achievement. Participants will be introduced to curriculum mapping through the use of Rubicon Atlas.

35. Subtraction and Place Value Unlike addition, subtraction is neither commutative nor associative. Yet, like addition, subtraction uses place-value notation! This talk will examine why subtraction and addition are both so similar and so different.

36. Alice in Numberland Explore whimsical, engaging, hands-on mathematical activities based on Alice's Adventures in Wonderland. All participants will get samples of the activities and their relationship to the appropriate content standard.

37. Multiple Ways to Multiply This workshop will present a variety of ways to multiply. See different strategies that enable struggling students to learn the multiplication tables. Lattice multiplication and partial products will be explored.

38. Best Resources

Ten SMART Board resources can make math jump off your students' pages. Utilize your own resources (SMART Notebook® and class textbooks), and explore new resources (LEGO MINDS TORMS® and more) in new ways.

Directions to SUNY College at Old Westbury

42. Improving Student Performance on the AP® Stat Exam

An inside look from an AP Statistics® reader into what graders are looking for! Common errors made by students will be discussed, along with tips for giving your students a better chance of getting a 4 or 5.

44. TI-84 Tips and Tricks for Algebra Students
These tips and tricks can help your algebra students. Bring
your calculator to update to the 2.55MP operating system.
Among other things this enables you to use a fraction bar
on your TI-84. 43. Creating an Interactive Math Classroom
Create an atmosphere of trust while engaging all students.
Let them discover math using real world images. Get actual Regents exams on your graphing calculators for review. Send, collect, and grade your students instantly.

45. Problem Solving to Supplement the CurriculumLet's try some problems today that can supplement our teaching! These problems can be used in our classes to challenge our students and to enhance their thinking skills!

46. Making a Collaborative Class Work for Students and Teachers.

47. Creative Problem Solving: Knowledge-Building & Integrating your different styles of personality into your * Planning * Seating * Teaching * Vocabulary * in an ITC class of 34 students in HS Algebra and HS Geometry.

See how psychology enables you to learn and do more math

48. Deconstructing Civil War Quilt Blocks
How were squares, triangles, and diamonds used in patchwork quilt blocks in the Civil War era? How did people minimize fabric with various seam allowances? Geometry and history will mesh in this interdisciplinary lesson.

What should you know before you teach elementary math? How well do pre-service methods courses prepare future teachers and their future students? You will discuss the practicality of learning to teach math in the college classroom. 49. What One Needs to Know What should you know before the company to the company of the company

