MATHEMATICS ASSOCIATION of AMERICA SEAWAY SECTION & NEW YORK STATE ASSOCIATION of TWO YEAR COLLEGES, Region I FALL 2007 JOINT CONFERENCE
October 19-20 at Monroe Community College in Rochester, New York

PROGRAM

Friday Evening, Monroe A/B (Building 3, Room 205)

6:00 – 7:00 Social Hour (cash bar)

7:00 – 8:30 Dinner

8:30 – 9:30 ***Math Busters! Examining Mathematical Folklore,*** **Dr. Mark McKinzie, St. John Fisher College**

Have you heard…

- the story of the student who walks into class late, and mistakes a listing of three open research problems on the board for a class assignment; weeks later, the student apologizes to the professor for being able to only do two of the problems, and taking so long to submit his work
- the story of Gauss as a school child, flummoxing his teacher by quickly computing the sum $1 + 2 + 3 + \ldots + 100$
- the story that Columbus was trying to prove that the Earth is round

Which story is mostly true, which is mostly false, and which is probably false but was claimed to be true by the subject of the story? In this talk, we will examine these and other mathematical folk tales, seek the origins of each story, and attempt to determine what truth, if any, lies behind each of them.

Saturday Morning, Monroe A/B (Building 3, Room 205)

8:00 – 8:40 Continental Breakfast

8:40 – 8:45 Welcome, **Dr. Michael McDonough, Dean of Liberal Arts, Monroe Community College**

8:45 – 9:35 **Bruce Tesar, Dept. of Linguistics, Rutgers University**
Output-Driven Functions: The Mathematics of Linguistic Sound Patterns

Phonology is the study of the sound patterns of the world's languages. The phonology of a language can be understood as a function, mapping an underlying sequence of phones (the input) to a surface sequence of phones that is the actual pronunciation (the output). One striking fact about languages is that, to a great extent, phonologies can be characterized by conditions on the outputs of the function: a language specifies conditions that must be satisfied by output forms, and a particular output form is determined by altering the input form only to the extent necessary to satisfy the output conditions. This talk presents a mathematical characterization of this property. A phonological function is output-driven if, for any input *A* mapped to an output *X*, it is the case that every other input that is more similar to *X* than *A* is also is mapped to *X*. A linguistically-motivated similarity relation will be described as a part of the characterization. The definition of output-driven functions is part of a larger research program to uncover the mathematical structures imposed by the human mind on linguistic sound patterns, helping to explain why languages are the way they are, and how children are able to learn their native languages so quickly and accurately.

9:45 – 10:35 **David Bressoud, Macalaster College, MN (Randolph Lecture)**
Calculus in High School - The numbers and their implications

We are at or very close to the cross-over point where more students take Calculus I in high school than in college. This talk will look at what we know about those who take calculus in high school, explain what we don't know (and wish we did), and consider the implications for the teaching of mathematics in both high school and college.

10:35 – 11:00 Business Meeting/Break

11:10 – 12:00 **Joseph Gallian, University of Minnesota, Duluth**
The Making of the 2003 Math Awareness Month Poster

This talk concerns the problem of traversing an *m* by *n* directed grid embedded on a torus so that each vertex is visited exactly once before returning to the starting position. We include an application to computer graphics that became the image on 2003 Mathematics Awareness poster.

12:00 – 1:15 **Buffet Lunch, Main Dining (Behind Monroe A/B)**

1:30-5:00 Contributed Talks

Saturday afternoon
Contributed Talks
Abstracts

B11-102 Computer Lab

1:30 – 2:30

Something Old, Something New, Some Excel and Java Too! Dynamic Visualizations for Calculus

Paul Seeburger, Monroe Community College

A series of visualization tools for Calculus will be presented, including several dynamic graphical Excel workbooks illustrating tangent lines, Riemann sums, Taylor polynomials, sequences & series, etc., and a number of Java applets that allow visualization of washer and shell methods, solids with a common cross-section, slope fields, 3D graphs of functions of two variables, and Taylor polynomials for approximating functions of two variables. A brief discussion of Horner's Rule and its application to efficient evaluation of a polynomial of two variables will also be included if time allows. All demonstrations have been created by the presenter and most will be either available on his website or can be found on publisher websites supporting various Calculus textbooks.

2:30-3:00

Computational Biology for Mathematics and Statistics Majors

James Halavin, Rochester Institute of Technology

Biotechnology, Computational Biology and Bioinformatics are rapidly growing interdisciplinary fields which require knowledge in computer science, mathematics and statistics, and biology. Methods of introducing mathematics and statistics majors to computational biology will be covered in this talk. Dual degrees, Computational Biology Options, Minors, and special topics courses will be presented. Sample programs, proposed or in place, at RIT will be discussed.

3:00-4:00

How to Motivate Students to Learn by Using Software

Kristen Elmore, Hawkes Learning Systems

In our presentation, we will demonstrate how Hawkes Learning Systems helps students and instructors in learning and teaching mathematics. This courseware program has changed the face of mathematics education, with its student software, online grade book, and test generator. The student software promotes grade improvement and motivates students by engaging them with interactive learning. We will explore how the software helps students learn through tutorials, unlimited practice, mastery-based homework assignments, and helpful feedback provided by artificial intelligence. These features make it ideal for all types of learning environments: on its own or as a supplement, and in online, distance-learning, self-paced, or traditional lecture courses. Students aren't the only ones who benefit from the courseware. Our online grade book and state-of-the-art test generator are valuable tools for instructors, as they greatly improve course management and make the grading process easier. Throughout the presentation, we will show these and many more beneficial aspects of the Hawkes Learning Systems courseware, and will conclude with questions and answers.

B11-103

1:30-2:30

Practicing What We Preach: Demonstrating Effective Cooperative Learning Practices

Annette Leopard and Karen Wells, Monroe Community College

The presenters will make the case for using cooperative education techniques. A number of classroom-tested techniques will be demonstrated. Sample activities for a variety of mathematics courses will be explored.

2:30-3:30

"Just in Time" Teaching and Learning

Patricia Kuby, Monroe Community College

Involving students in the learning process while having immediate feedback on their understanding is an instructor's dream. This presentation will demonstrate how applets and even "lectures" combined with a student response system creates an exciting, interactive Statistics classroom; one conducive to learning and accessing comprehension for both student and instructor.

3:30-4:30
The Short Answer Software Tyranny: Can It Be Overthrown?
John C. Miller, The City College of C.U.N.Y
No conscientious instructor poses short answer problems to students in person, for homework, or on exams. Only step-by-step solutions consistently permit the instructor to respond helpfully. The same principle applies to practice problem software. This presentation provides many examples and a call to action.

B11-105

1:30-2:00
Discrete Inverse Problems in Undergraduate Mathematics
Andrzej W. Kedzierawski, SUNY Geneseo
Exposing students to the concepts of direct and inverse problems allows us to introduce and investigate fundamental mathematical issues and provide an opportunity to integrate science with mathematics. Inverse problems also illustrate applications of mathematics to modern technology such as tomography, image reconstruction and objects identification that should engage student's interest and enhance their motivation. In particular, we present three examples of the discrete inverse problems: over determined, underdetermined and mixed-determined problem.

2:00-2:30
The 'Slow' Euclidean Algorithm
Sam Northshield, SUNY-Plattsburgh
Iteration of $(a,b)\text{->}(a,b\text{-}a)$ or $(a\text{-}b,b)$ according to whether $a < b$ or $a > b$ (or termination if $a\text{-}b$) is called the 'slow Euclidean algorithm'. It terminates with the greatest common divisor of the original a and b. The inverse process, starting at (1,1), yields a tree (the Stern-Brocot tree) and it is easily seen that every pair of relatively prime integers appears exactly once in the tree. We shall discuss Stern's diatomic sequence as well as higher dimensional generalizations of this sequence based on corresponding higher dimensional slow Euclidean algorithms. We shall also discuss relations and generalizations of Ford circles, Farey series, and continued fractions.

2:30-3:00
Paradoxes and Fallacies in Mathematical Induction
Leandro Junes, SUNY at Binghamton
A teacher announces in class that an examination will be held on some day during the following week, and moreover that the examination will be a surprise. One of his students "proves" that a surprise exam cannot occur. This student used what we all call the method of mathematical induction. It is a powerful tool used to establish that a given statement is true for all natural numbers bigger than or equal to a fixed natural number N. For the experienced mathematician, setting up the induction is as important as the proof itself. I will discuss how wrong set-ups and careless reasoning can lead to fallacies and paradoxes like the one above.

3:00-3:30
Finitely Many Proofs of the Infinitude of Primes
Amitabha Tripathi, SUNY Oswego
We present several proofs of the well known result that the number of primes are infinite. The proofs range from use of facts from elementary Number Theory to Analysis and Topology. The talk will be aimed at motivated undergraduates, but should also be useful to College teachers.

3:30-4:30
That's a Good Question!
David Peterson, Monroe Community College
For nine years I have been answering questions from students, teachers, and parents as a volunteer for *Ask Doctor Math*, an online service operated by the Math Forum, and it has been a valuable experience that has broadened my perspective both on math and on how it is taught. The truly interesting questions, however, are the "off the wall" questions that students often don't think they can ask their teachers (or they tried, and the teacher had no answer). These include questions like "Why does the order of operations have to be that way?" or "Why do you need a common denominator to add fractions, but not to multiply them?". I will discuss some of my favorite questions to illustrate what I have learned about math, education, and the world through this unique experience, and what it has contributed to my classroom teaching and tutorial work. I will also demonstrate how Dr. Math operates, and how we formulate an answer that will help a student discover the answer himself or herself, rather than just handing him or her a solution.

B11-107

1:30-2:30 ***Precalculus with the TI Navigator System***
George Hurlburt, Corning Community College
The TI Navigator System allows a teacher to wirelessly interface with 32 student calculators. The speaker will give a brief overview of the use and capabilities of the system, and describe how he is using the system in his Precalculus class.

2:30-3:00
Infinitesimals in Modern Mathematics
Jonathan Hoyle, Eastman Kodak
This talk will tour the various modern mathematical models of infinitesimals. After a brief historical overview of their use by mathematicians over the centuries, modern definitions will be introduced. By extending the ordered field of the reals, Non- Archimedean values appear, and depending upon the construction, standard theorems from analysis may produce very unusual results. An introduction of Nonstandard Analysis will be made first, including both algebraic and set-theoretic constructions of infinitesimals. This will be followed by examinations of Surreal numbers, Smooth Infinitesimal Analysis and Superreal numbers. Comparisons between nonstandard approaches with traditional delta/epsilon proofs will be made, showing the mathematical pros and cons for each method.

3:00-3:30
Unbounded Solutions of a Delayed Max-Type Difference Equation
Michael A. Radin, Rochester Institute of Technology
We will investigate the necessary and sufficient conditions for every positive solution of a delayed Max-Type Difference Equation to be unbounded. In addition, we will analyze how many subsequences converge to 0 and how many subsequences will diverge to infinity based on the period of the given sequence.

3:30-4:00
Iterations of the Words to Numbers Function
Matthew E. Coppenbarger, Rochester Institute of Technology
The Words to Numbers function is defined and we are asked to determine the smallest integer that requires a specified number of iterations of the function that must be applied to the integer until the sequence generated by these iterations becomes stable or cycles. The solution is surprisingly nontrivial and requires a brief synopsis of the historical origins of the names of large numbers and a systematic approach to the assignment of the names of large numbers.

4:00-4:30
Pierangela Veneziani, SUNY College at Brockport
We will present a novel approach to obtain algorithmic bounds for the probability of the union of n events.
Upper and lower bounds of degree m can be obtained provided that we can construct dual feasible bases of certain Linear Programs. It is possible to interpret the components of any dual feasible solution as hyperedge weights. The idea behind our method is to view the weight corresponding to each hyperedge as the sum of some nodes weights. One advantage of this approach is that this re-formulation of the problem is
polynomially solvable. Another advantage of it is it generalizes several other bounding schemes previously proposed in the literature, such as Dawson-Sankoff's lower bound, De Caen's lower bound and Kuai, Alajaji, Takahara's lower bound, Kwerel's upper bound as well as Prékopa's algorithmic bounds. Preliminary numerical results suggest our approach can indeed provide very good approximations.

B11-300

1:30-2:00

Distributions Arising in Connection with the Inspection Paradox
James Marengo, Rochester Institute of Technology
The so called "Inspection Paradox" refers to the fact that in a Renewal Process, the length of the interarrival period which contains a fixed time t is stochastically larger than the length of a typical interarrival period, even though the length of the kth period is the same for every k. Using conditioning arguments, explicit formulas will be derived for the distributions of the periods that precede time t, the one that contains time t, and the ones that come after time t, in the case that that the renewal process has a memoryless interarrival distribution. These formulas have some surprising consequences.

2:00-2:30
Polynomial Endomorphisms of Rings
Howard E. Bell, Brock University
An endomorphism f of the ring R is called a polynomial endomorphism if there exists a polynomial $p(X)$ in Z[X], of co-degree at least 2, such that $f(x) = p(x)$ for each element x of R. We discuss existence of polynomial endomorphisms, we give examples of polynomial endomorphisms which are not power maps, and we discuss commutativity of rings admitting suitably-constrained polynomial endomorphisms.

2:30-3:00
Factorization of Quadratic Polynomials in Z[[x]]
Daniel Birmajer, Nazareth College
We study the arithmetic of the ring $Z[[x]]$ of formal power series in the with integer coefficients, and present some irreducibility criteria. In particular, we discuss necessary and sufficient conditions for a quadratic polynomial to be irreducible as power series.

3:00-3:30
On Generators of the Direct Sum of Matrix Algebras
Bogdan Petrenko, SUNY College at Brockport
I will give some formulas for the minimal number of generators of finite direct sums of matrix algebras over the integers and over finite fields. These formulas are simple to understand and use. The talk will be based on my joint work with Said Sidki (Journal of Algebra, 310 (2007), no. 1, 15--40) and Rostyslav Kravchenko(arXiv:math/0611674).

3:30-4:00
The Atiyah-Singer Index Theorem
Paul Loya, SUNY at Binghamton
In 1963, Sir Michael Atiyah and Isadore Singer gave their first proof of the now famous "Atiyah-Singer Index Theorem," which in the opinion of some mathematicians is one of the greatest theorems of the 20-th century. This theorem was of such great importance that Atiyah and Singer shared the 2004 Abel prize in mathematics for their work on the theorem. (The Abel Prize can be thought of as the Nobel Prize in mathematics.) In my talk we'll describe in basic terms what the Atiyah-Singer theorem says and we'll give an indication of how it is proved.

4:00-4:30
Finite Index Subgroups of Thompson's Group F
Bronlyn Wassink, SUNY Binghamton
In this talk, I will categorize all of the finite index subgroups of Thompson's Group F that are isomorphic to F. I will also provide examples of finite index subgroups of F that are not isomorphic to F. These results are joint work with Collin Bleak, University of Nebraska - Lincoln. No knowledge of Thompson's Group is needed to enjoy this talk.

B11-301

1:30-2:00
Constructing Galois Covers of Graphs
Howard Skogman, SUNY College at Brockport
In this talk we will present a construction that takes any base graph X, and any Galois group G, and creates a graph Y such that Y is a Galois cover of X, with Gal(Y/X) =G. Moreover, any Galois cover can be realized by this construction. This talk will assume only a basic knowledge of group theory.

2:00-2:30
Symmetries, Coloring and Polyanumeration
Hossein Shahmohamad, Rochester Institute of Technology
Polya Enumeration has proven to be a very effective way of counting the different coloring of beads, necklaces, cubes and other objects in two or three dimensions. With the computation of the group of symmetries of any of these objects and the corresponding cycle index, one can easily determine the total number of colorings of vertices, edges, faces and more. This talk is based on the master thesis of Jeremy Nieman at RIT.

2:30-3:00
Generalized Social Networks and Their Structure: Rings, Ribbons and Families
Deana B. Olles, Rochester Institute of Technology

The structure of a social network is a significant factor in studying the behaviors of the individuals in that network, the spread of information (or rumor) throughout the network or possible the spread of disease. The study of Graph Theory is applied to understand said networks and their properties. Several general forms of possible social structure, designed through the joint effort of psychologists and mathematicians, have interesting properties that may allow us to make comparisons to actual social communities. Rings, ribbons and families are three of these such networks, which will be examined in detail. Several models for information (rumor) flow over these networks are examined to determine the dependence this spread may have on structure.

3:00-3:30
Foliations by Minimal Surfaces and Ricci Curvature
Richard Escobales Jr, Canisius College
Let (M^n, g) be a closed, connected, oriented, C^∞, Riemannian, n-manifold with a transversely oriented, codimensional-2 foliation $\boldsymbol{F}$. Suppose the transverse volume form μ is basic and $\{X, Y\}$ are basic vector fields, so $\mu(X, Y) = 1$. Then the leaf component of $\{X, Y\}$, $\nu\{X, Y\}$, is globally defined on M and is independent of the basic pair of vector fields $\{X, Y\}$ satisfying the above equation as observed by Cairns in [C]. Using the Bochner technique, we show under appropriate assumptions on cohomology and on the Ricci curvature of the leaves of the foliation $\boldsymbol{F}$, that the distribution orthogonal to that of the leaves, $\boldsymbol{H}$, is integrable and the leaves of this new foliation are minimal surfaces of M. In the second section we provide some analogous results for the special case when $\boldsymbol{F}$ is a Riemann foliation.

3:30-4:00
What does stirring coffee have to do with functors?
Seshandra Pallekonda, SUNY at Binghamton
Present day Algebraic/Differential Topology seems very abstruse with heavy Algebraic Machinery, which often keeps one wondering about the motivation for the ideas involved and their applicability. To address this, I will discuss a few problems, with solutions surprisingly provided by the abstract machinery, such as, proving the existence of a fixed point in the coffee after stirring.

4:00-4:30
Finite vs. InFinite Fullernes and the Ihara Zeta Function
Tim Doster*, Rochester Institute of Technology, Contributor: Alicia Hofmann - Huntington University, Advisor: Stratos Prassidis - Canisius College
Fullerenes determine graphs where the primitive loops are pentagons or hexagons. We consider spherical (classical), toroidal and kleinian fullerenes, and we study their spectral properties. As an application, we write infnite fullerenes as limits of finite toroidal fullerenes, and we use this information to compute the Ihara zeta function.

B11-306

1:30-2:00
A Radical Approach to a Sum of Radicals
Gabriel Prajitura, SUNY Brockport
We will discuss some techniques in problem solving while doing the dissection of an example.

2:00-2:30
A Different Approach to the Derivation of the Product Rule for Differentiation
Ron Sperber, Keuka College
The usual derivation presented in a Calculus I class for the product rule uses an introduced term that is added and subtracted in order to have a form that can be separated into two parts. I present a different approach that is related to the idea of the derivative as a linear approximation of a function.

2:30-3:00
Visualizing Fundamental Concepts in Precalculus and Calculus
Deborah Moore-Russo and Thomas Schroeder, University of Buffalo
This presentation will present research findings from one study involving undergraduate calculus students and another study with middle and high school teachers holding mathematics degrees. Results indicate the need for and possible benefit of using manipulatives to enhance spatial visualization of key Precalculus and Calculus topics. An example of a three-dimensional manipulative will be shared with session participants.

3:00-3:30

Intuitively Clearer Explanations for the Sum of Squares Formula

Jonathan Cox, SUNY Fredonia

All modern calculus textbooks include formulas for the sum of the first *n* integers and the sums of their squares and cubes. These formulas are indispensable in evaluating integrals as limits of Riemann sums. The sum of integers formula can be explained in such a way that it is immediately obvious that the formula is correct. Why is the sum of squares formula valid? Textbooks that prove it do so using induction or an argument involving a telescoping sum with cubic terms, neither of which makes very clear why the formula has the form that it does. In this talk, we explore various alternative derivations of the sum of squares formula. While none of these seem to be quite as illuminating as the proof of the sum of integers formula, they offer an improvement over the standard arguments.

3:30-4:00

Midpoint Rules, Trapezoid Rules, and the Hermite-Hadamard Inequalities

Peter R. Mercer, Buffalo State College

To approximate the Riemann Integral of a function, we may use the Midpoint Rule or the Trapezoid Rule. For a convex function, the Midpoint rule is always too small and the Trapezoid Rule is always too large. This is what the Hermite-Hadamard Inequalities say. We discuss these, and possible generalizations to the Riemann-Stieltjes Integral.

B11-310

1:30-2:30

Panel Discussion: A Conversation about "the Major" with J.Gallian and D. Bressoud

David Bressoud, Joseph Gallian.

Our invited speakers will host a round table discussion about the problems and strengths in the programs we call "the Math Major."

Likely topics include:

- The great divide: undergraduate preparation versus the reality of grad school
- The effectiveness of undergraduate research as part of the curriculum
- Depth versus breadth
- How to streamline the major to individual needs and still have “the major"?

2:30-3:00

What Can the Mathematics Professor Do to Improve Pre-College Mathematics Education?

Jim Matthews, Siena College

During this talk we will suggest three different projects you can do to improve the mathematical experience of elementary, middle and high school students. We will describe each project and give some examples of materials that can be useful for each. We will also make some recommendations on how to get started. Finally, we will describe some details of our experiences, both positive and negative, that may be useful for anyone giving these projects a try.

3:00-3:30

Mathematics for High School Teachers: New Course Creation

Dawn Jones, SUNY College at Brockport

After participating in the PMET program I designed a course for prospective high school mathematics teachers. I have taught this course three times, the most recent was team taught with a recently retired high school teacher who has over 30 years experience teaching. I will give the results of a survey we gave the students and some surprising.

3:30-4:00

An “Advanced Perspectives” Course for Prospective High School Math Teachers

Manuel Lopez, Rochester Institute of Technology

In alignment with recommendations from the MET report (CBMS) and the result of a PMET mini-grant for the collaborative development of a capstone course for future secondary teachers, this course was designed to help students to connect their undergraduate mathematics experience to the high school mathematics curriculum. Students take Advanced Mathematical Perspectives on School Mathematics during the Senior year prior to student teaching. The textbook, "Mathematics for High School Teachers, An Advanced Perspective" by Usiskin et al., was supplemented with NCTM resources and "Problem Posing: Reflections and Applications" by Brown and Walter. This presentation will describe the planning process, the first iteration (initial conception and what really happed) and the second iteration (lessons learned and modifications). The associative property is often regarded as indispensable. Very few mathematics students have ever heard of ways it might be weakened. The usual context for such weak associative law is in and algebraic structure using the Moufang identities in place of the associative law. In other words, four specific identities

are allowed as opposed to allowing any valid rearrangement of parenthesis as an identity. We argue that the appropriate context to explore possible weakenings of associativity is category theory. Since a category requires the associative law to hold for composition of morphisms, weakening the associativity condition would not necessarily result in a category in the traditional sense. Exploring how to treat weakly associative categories would be important if we wanted to export these ideas from algebra to other mathematical branches.

B11-203 Student Talks

B11-207 Student Talks

Registration

Registration will take place in the lobby outside of Monroe A/B (Building 3, Room 205) on Friday evening during the social hour from 6:00 to 7:00, and on Saturday morning from 8:00 until 11:00.

Accommodations

Microtel Inn – Rochester is located at 905 Lehigh Station Road in Henrietta, NY 14467. It is within 15 minutes driving time to Monroe Community College. You have a choice of a room with one queen size bed or a room with two twin size beds. Check in time is 2:00 PM and check out time is 12:00 PM. The cost of either room is $59.95 plus tax and includes a continental breakfast.
Phone: (585)334–3400.

The Best Western Marketplace Inn is located at 940 Jefferson Road in Rochester, NY 14623. It is located a few minutes from Monroe Community College. Each room has two queen size beds. Check in time is 3:00 PM and check out time is 11:00 AM. The cost for the room is $99.00 plus tax and includes a hot breakfast in the morning, a dessert bar starting in the late afternoon, and a daily USA Today newspaper. This hotel has a fitness center on site.
Phone: (585)427–2700.

Reservations must be made by September 18, 2007, for either hotel. You will need to tell them that you are attending a conference at Monroe Community College.

Meeting Websites

Please check the MAA or NYSMATYC websites for program updates: www.nysmatyc.org or www.math.binghamton.edu/maa_seaway/

To reach the MCC Brighton Campus from:

The West (Buffalo)	Take Thruway 90 east to exit 46; take 390 north to exit 16, the second East Henrietta Rd. (Rt. 15A) exit; turn left and continue south on 15A for about 1/2 mile to the main campus entrance.
The East (Syracuse)	Take Thruway 90 west to exit 46 and proceed as above.
South (Geneseo)	Take 390 north to exit 16 - the second East Henrietta Road exit and proceed as above.
Brockport/Spencerport	Take Route 531 east to 490 east and then to 390 south; take exit 16B (East Henrietta Rd. - Rt. 15A); turn right and proceed for about 1/2 mile to the main campus.

Parking

Conference participants should park in parking lot M.

You can access parking lot M from either Sports Road or Center Road. Once in lot M: walk to the upper RIGHT HAND side of the parking lot (the pond will be on your right) and follow the sidewalk to the new Campus Center entrance.