Calendar of Events
For the Week of March 30th - April 3rd

MONDAY, 03/30/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

TUESDAY, 03/31/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132
LIE THEORY THROUGH EXAMPLES (John Baez)

3:40-5:00PM, Surge 268
FUNCTIONAL ANALYSIS (Larry Harper)
"Continuous Combinatorics, Probability & Analysis (cont.)"

WEDNESDAY, 04/01/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

10:10-11:00AM, Surge 284
TOPOLOGY (Stefano Vidussi)

2:10-3:00PM, Surge 284
OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)
"Khovanov Homology"

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, INTS 2132
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

4:10-5:00PM, Surge 284
COLLOQUIUM-
~No Colloquium this week~

THURSDAY, 04/02/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR (Aviv Censor)
~ No Seminar ~

9:40-11:00AM, Pierce 2416
FRAC TAL RESEARCH GROUP (Rob Niemeyer)
"Toroidal Billiards"

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Jonathan Sarhad)
"Spectral Triples of the Square, Triangle and Countable Sums of Triangles"

FRIDAY, 04/03/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Reinhard Schultz)
"Classifying exotic spheres and other manifolds"

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
Reinhard Schultz  
(UCR)  

"Classifying exotic spheres and other manifolds"  

Abstract: This talk will summarize the standard way of classifying the exotic smooth structures on spheres via algebraic invariants, and the general theory arising from this classification will be outlined.

Friday, April 3, 2009  
Surge 284  
11:10-12:00pm
MONDAY, 04/06/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)
2:10-3:00PM, Surge 284
TOPOLOGY (Stefano Vidussi)

TUESDAY, 04/07/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Kwangwoo Lee)
"Segre and Chern classes after Fulton"
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)
11:10-12:30PM, Surge 284
12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)
2:10-3:30PM, INTS 2132
LIE THEORY THROUGH EXAMPLES (John Baez)
3:40-5:00PM, Surge 268
FUNCTIONAL ANALYSIS (Larry Harper)
"Continuous Combinatorics, Probability & Analysis (cont.)"

WEDNESDAY, 04/08/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (John Bueti)
"The Density Hales-Jewett Theorem (cont'd)"
11:10-12:00PM, Surge 277
OPERATOR ALGEBRAS & RELATED TOPICS (Richard Han)
"Skein Theory for the D_2n Planar Algebras (cont.)"
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)
3:10-4:00PM, INTS 2132
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)
4:10-5:00PM, Surge 284
COLLOQUIUM (Xiaojun Chen- University of Michigan)
"Cyclic homology, string topology and their quantization"

THURSDAY, 04/09/09
9:40-11:00AM, Surge 268
GROUPS SEMINAR (Julie Bergner)
"Simplicial Complexes, Simplicial Sets, and Nerves of Groupoids"
9:40-11:00AM, Pierce 2416
FRACAL RESEARCH GROUP (Rob Niemeyer)
"Mathematical Billiards and Fractal Geometry III"
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)
11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)
12:40-2:00PM, Surge 284
TOPOLOGY (Stefano Vidussi)
2:10-3:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)
2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)
3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Nishu Lal)
"Spectral Analysis on Sierpinski Gasket: Decimation Method"
FRIDAY, 04/10/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Reinhard Schultz)
"Classifying exotic spheres and other manifolds"
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)
3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
MONDAY, 04/13/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

2:10-3:00PM, Surge 284
TOPOLOGY (Mohamed Ait Nouh)
“Scharlemann Cycles”

TUESDAY, 04/14/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132
LIE THEORY THROUGH EXAMPLES (John Baez)

3:40-5:00PM, Surge 268
FUNCTIONAL ANALYSIS (James Stafney)
“An orthogonal decomposition of vector fields”

WEDNESDAY, 04/15/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

11:10-12:00PM, Surge 277
OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, INTS 2132
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

4:10-5:00PM, Surge 284
COLLOQUIUM- No Colloquium this week.

THURSDAY, 04/16/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR (Julie Burgner)
“Simplicial Complexes, Simplicial Sets, and Nerves of Groupoids (cont.)”

9:40-11:00AM, Pierce 2416
FRACiAL RESEARCH GROUP (Michel Lapidus)

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284
TOPOLOGY (Stefano Vidussi)

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Hafedh Herichi)
“Properties of the p-factors operator associated to
Generalized Fractal Strings (Part I)”

FRIDAY, 04/17/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Reinhard Schultz)
“Classifying exotic spheres and other manifolds”

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
MONDAY, 04/20/09
2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)
2:10-3:00PM, Surge 284  TOPOLOGY (Stefano Vidussi)

TUESDAY, 04/21/09
11:10-12:30PM, Surge 268  ALGEBRAIC GEOMETRY (Ziv Ran)
11:10-12:30PM, Surge 284  TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)
12:40-2:00PM, Surge 284  ALGEBRAIC ANALYSIS (Wee Liang Gan)
2:10-3:30PM, INTS 2132  LIE THEORY THROUGH EXAMPLES (John Baez)
3:40-5:00PM, Surge 268  FUNCTIONAL ANALYSIS (James Stafney)
"An orthogonal decomposition of vector fields"

WEDNESDAY, 04/22/09
10:10-11:00AM, Surge 268  COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)
11:10-12:00PM, Surge 277  OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)
2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)
3:10-4:00PM, INTS 2132  TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)
4:10-5:00PM, Surge 284  COLLOQUIUM (Bernard Badzioch- SUNY Buffalo)

THURSDAY, 04/23/09
9:40-11:00AM, Surge 268  GROUPOIDS SEMINAR (Aviv Censor)
9:40-11:00AM, Pierce 2416  FRACTAL RESEARCH GROUP (Michel Lapidus)
11:10-12:30PM, Surge 268  ALGEBRAIC GEOMETRY (Ziv Ran)
11:10-12:30PM, Surge 284  TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)
12:40-2:00PM, Surge 284  ALGEBRAIC ANALYSIS (Wee Liang Gan)
2:10-3:00PM, Surge 284  TOPOLOGY (Stefano Vidussi)
2:10-3:30PM, INTS 2132  GEOMETRIC REPRESENTATION THEORY (John Baez)
3:40-5:00PM, Surge 268  MATHEMATICAL PHYSICS (Nishu Lal)
"The spectral zeta function for fractals & its connection with the zeta function of a polynomial."

FRIDAY, 04/24/09
11:10-12:00PM, Surge 284  DIFFERENTIAL GEOMETRY (Reinhard Schultz)
"Complex line bundles with inequivalent nonnegatively curved metrics"
2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)
3:10-4:00PM, Surge 268  COMMUTATIVE ALGEBRA (David Rush)
Abstract: One of the long standing problems in homotopy theory is the question of how, for a given space $A$, one can characterize the class of spaces which are homotopy equivalent to the pointed mapping space $\text{Map}(A, Y)$. In case where $A$ is an $n$-dimensional sphere $S^n$ this problem was solved in several ways using the machinery of operads, PROPs, Segal special Delta-spaces etc. The common feature of all these descriptions is that they detect if a given space $X$ is of a type of a mapping space from $S^n$, using only certain maps between finite product of $X$. This shows the mapping spaces $\text{Map}(S^n, Y)$ are essentially algebraic objects. The talk will describe how one can try to generalize this approach to describe mapping spaces for spaces $A$ other than $S^n$ and the obstructions that one encounters.

Wednesday, April 22, 2009
Surge 284
4:10-5:00pm
Tea Time at 3:40pm
Calendar of Events
For the Week of May 4-8, 2009

MONDAY, 05/04/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)

2:10-3:00PM, Surge 284
TOPOLOGY (Fangyun Yang)
"A natural splitting of the Milnor number, I"

TUESDAY, 05/05/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)
"Subscheme methods for stable curves"
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

11:10-12:30PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

12:40-2:00PM, Surge 284
LIE THEORY THROUGH EXAMPLES (John Baez)

2:10-3:30PM, INTS 2132
FUNCTIONAL ANALYSIS (James Stafney)
"Curl of vector fields and removable sets"

3:40-5:00PM, Surge 268

WEDNESDAY, 05/06/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

11:10-12:00PM, Surge 277
OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)

2:10-3:00PM, Surge 284
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

4:10-5:00PM, Surge 284
COLLOQUIUM (Marie Vitulli- University of Oregon)
"Seminormality and Weak Normality"

THURSDAY, 05/07/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR (Christopher Walker)
"Introduction to Groupoidification"

9:40-11:00AM, Pierce 2416
FRACIAL RESEARCH GROUP (Michel Lapidus)

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Hwa Young Lee)
"Examples on Chern Classes"
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

11:10-12:30PM, Surge 284

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284
TOPOLOGY (Fangyun Yang)
"A natural splitting of the Milnor number, II"

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Scot Childress)
"Cylinders: because why not?"

FRIDAY, 05/08/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Fred Wilhelm)

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliiy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
Abstract: In this talk we outline the history of the twin theories of weak normality and seminormality for commutative rings with an emphasis on the recent developments in these theories over the past fifteen years. We review and expand upon the original definitions of seminormalization and weak normalization via gluings, Hamann’s criterion for seminormality, Swan’s contributions, connections with the Picard group, systems of (weak) subintegality, a new element wise criterion for weak subintegality, and other developments, as time permits. We will show that much of the original theory holds for general commutative rings. We only specialize to reduced Noetherian rings when absolutely necessary. For the most part, this talk should be accessible to graduate students who have had a first year course in abstract algebra.”

Wednesday, May 6, 2009
Surge 284
4:10-5:00pm
*Tea Time at 3:40pm*
UNIVERSITY OF CALIFORNIA, RIVERSIDE
Department of Mathematics

Calendar of Events
For the Week of May 11-15, 2009

MONDAY, 05/11/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)
TOPOLOGY (moved to Thursday)

TUESDAY, 05/12/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)
"Tautological Module For Nodal Curves"

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132
LIE THEORY THROUGH EXAMPLES (John Baez)

3:40-5:00PM, Surge 268
FUNCTIONAL ANALYSIS (Victor Shapiro)
"The Schrodinger Operator & the Palais-Smale Condition"

WEDNESDAY, 05/13/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

11:10-12:00PM, Surge 277
"Intermediate Subfactor Lattices" (cont.)
DEFORMATION THEORY (Vasiliy Dolgushev)

2:10-3:00PM, Surge 268
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Juhi Jang)
"Acoustic Limit for the Boltzmann Equation in Optional Scaling"

4:10-5:00PM, Surge 284
COLLOQUIUM (Sunil Chebolu- Illinois State University)
"Lie After the Bloch-Kato Conjecture"

THURSDAY, 05/14/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR & Joint Meeting With FRG
(Joris Vankerschavemaker - Caltech
"Groupoids For Classical Field Theories With Symmetry"

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00 PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284
TOPOLOGY (Sunil Chebolu- Illinois State University)
"Some Fundamental Problems Involving Tate Cohomology"

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Vicente Alvarez)
"A Numerical Computation of Eigenfunctions for the Kusuoka Laplacian on the Siepinski Gasket"

FRIDAY, 05/15/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Zhuang-dan Guan)
"Solvmanifolds, Hyperelliptic Surfaces, Selfdual Calabi-Yau Threefolds"

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
Topology Seminar

Dr. Sunli Cheboulu
(Illinois State University)

"Some Fundamental Problems Involving Tate Cohomology"

Abstract: One of the long standing problems in homotopy theory is the questions how, for a given space A, one can characterize the class of spaces which are homotopy equivalent to the pointed mapping space Map (A, Y). In case where A is an n-dimensional sphere S^n this problem was solved in several ways using the machinery of operads, PROPs, Segal special Delta-spaces etc. The common feature of all these descriptions is that they detect if a given space X is of a type of a mapping space from S^n, using only certain maps between finite product of X. This shows the mapping spaces Map(S^n, Y) are essentially algebraic objects. The talk will describe how one can try to generalize this approach to describe mapping spaces for spaces A other than S^n and the obstructions that one encounters.

Thursday, May 14, 2009
Surge 284
2:10-3:00pm
MONDAY, 5/18/09
2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)
TOPOLOGY (Fangyun Yang) (moved to Thursday)

TUESDAY, 5/19/09
11:10-12:30PM, Surge 268  ALGEBRAIC GEOMETRY (Gwoho Liu)
"Chow Groups Of Bundles"

11:10-12:30PM, Surge 284  TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284  ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132  LIE THEORY THROUGH EXAMPLES (John Baez)

2:10-3:30PM, Surge 284  SPECIAL OPERATOR ALGEBRA SEMINAR (Yasuyuki Kawahigashi)
Univ of Tokyo “Super Virasoro Algebra & Noncommutative Geometry”

3:40-5:00PM, Surge 268  FUNCTIONAL ANALYSIS (Victor Shapiro)
“The Schrodinger Operator And The Palais-Smale Condition”

WEDNESDAY, 5/20/09
10:10-11:00AM, Surge 268  COMBINATORIAL NUMBER THEORY (John Buetti)
“Sums & Products Along Sparse Graphs”

11:10-12:00PM, Surge 277  OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)
“Khovanov Homology” (cont.)

2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)

2:10-3:00PM, INTS 2132  TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

4:10-5:00PM, Surge 284  COLLOQUIUM (Wee Tech Gan) - UCSD
“The Local Langlands Conjecture” (for GSp (4))

THURSDAY, 5/21/09
9:40-11:00AM, Surge 268  GROUPOIDS SEMINAR (Chris Walker)
“Introduction To Groupoidification” (cont.)

9:40-11:00AM, Pierce 2416  FRACITAL RESEARCH GROUP (Michel Lapidus)

11:10-12:30PM, Surge 268  ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284  TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284  ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284  TOPOLOGY (Fangyun Yang)
“A Natural Splitting Of The Milnor Number, II”

2:10-3:30PM, INTS 2132  GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268  MATHEMATICAL PHYSICS (Nishu Lal)
“Spectral Analysis On Self-Similar Sets & Spectral Zeta Function”

FRIDAY, 5/22/09
11:10-12:00PM, Surge 284  DIFFERENTIAL GEOMETRY (Professor Benjamin Weinkove) UCSD
“The Kahler-Ricci Flow On Hirschelohr Surfaces”

2:10-3:00PM, Surge 268  DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268  COMMUTATIVE ALGEBRA (David Rush)
Abstract: We discuss relations between superconformal field theory and noncommutative geometry. More specifically, we start with an irreducible, unitary positive energy representation of the Ramond algebra, which is one of the two N=1 super Virasoro algebras, and construct a net of spectral triples on the one-dimensional circle. (Here, a spectral triple is a noncommutative version of a manifold.) This is a joint work with S. Carpi, R. Hillier and R. Longo.

Tuesday, May 19, 2009
Surge 284
2:10 - 3:00 pm
Abstract: We discuss relations between superconformal field theory and noncommutative geometry. More specifically, we start with an irreducible, unitary positiveenergy representation of the Ramond algebra, which is one of the two N=1 super Virasoro algebras, and construct a net of spectral triples on the one-dimensional circle. (Here, a spectral triple is a noncommutative version of a manifold.) This is a joint work with S. Carpi, R. Hillier and R. Longo.
Wee Tech Gan
(UNIVERSITY OF CALIFORNIA SAN DIEGO)

"The Local Langlands Conjecture (for GSp4)"

Abstract: The local Langlands conjecture gives a classification of the irreducible (typically infinite-dimensional) complex representations of reductive p-adic groups, in terms of Galois theoretic data. I will describe the precise statement and discuss recent progress towards the conjecture.

Wednesday, May 20, 2009
Surge 284
4:10-5:00pm

Tea Time at 3:40pm
MONDAY, 5/25/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)
TOPOLOGY (Fangyun Yang) (moved to Thursday)

TUESDAY, 5/26/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Gwoho Liu)
"Chow Groups Of Bundles: Examples"
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

11:10-12:30PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

12:40-2:00PM, Surge 284
LIE THEORY THROUGH EXAMPLES (John Baez)

2:10-3:30PM, INTS 2132
FUNCTIONAL ANALYSIS (Z.D. Ren)
"Packing Balls In Certain Banach Spaces"

WEDNESDAY, 5/27/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

11:10-12:00PM, Surge 277
OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)
"Khovanov Homology" (cont.)
DEFORMATION THEORY (Vasiliy Dolgushev)

2:10-3:00PM, Surge 268
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

2:10-3:00PM, INTS 2132

4:10-5:00PM, Surge 284
NO COLLOQUIUM

THURSDAY, 5/28/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR (Aviv Censor)

9:40-11:00AM, Pierce 2416
FRAC TAL RESEARCH GROUP (Michel Lapidus)

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284
TOPOLOGY (Fangyun Yang)
"A Natural Splitting Of The Milnor Number, II"

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Mike Maroun)
"2-Dimensonal Conformal Quantum Field Theory"

FRIDAY, 5/29/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Brain Rolle)
"Generalized Complex Structures On Principle Tori Bundles"

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
MONDAY, 6/1/09
2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)
TOPOLOGY (Fangyun Yang) (moved to Thursday)

TUESDAY, 6/2/09
11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Gwoho Liu)
"Chow Groups Of Bundles" (cont.)
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:30PM, INTS 2132
LIE THEORY THROUGH EXAMPLES (John Baez)

3:40-5:00PM, Surge 268
FUNCTIONAL ANALYSIS (James Stafney)
"Harmonic Functions & Removable Sets"

WEDNESDAY, 6/3/09
10:10-11:00AM, Surge 268
COMBINATORIAL NUMBER THEORY (Mei-Chu Chang)

11:10-12:00PM, Surge 277
OPERATOR ALGEBRAS & RELATED TOPICS (Marta Asaeda)

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

2:10-3:00PM, INTS 2132
TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS (Qi Zhang)

4:10-5:00PM, Surge 284
COLOQUIUM (Scott Morrison) – Microsoft Station Q
"Classifying Subfactor Planar Algebras"

THURSDAY, 6/4/09
9:40-11:00AM, Surge 268
GROUPOIDS SEMINAR (Aviv Censor)

9:40-11:00AM, Pierce 2416
FRAC TAL RESEARCH GROUP (Michel Lapidus)

11:10-12:30PM, Surge 268
ALGEBRAIC GEOMETRY (Ziv Ran)

11:10-12:30PM, Surge 284
TOPICS IN REPRESENTATION THEORY (Vyjayanthi Chari)

12:40-2:00PM, Surge 284
ALGEBRAIC ANALYSIS (Wee Liang Gan)

2:10-3:00PM, Surge 284
TOPOLOGY (Stefano Vidussi)

2:10-3:30PM, INTS 2132
GEOMETRIC REPRESENTATION THEORY (John Baez)

3:40-5:00PM, Surge 268
MATHEMATICAL PHYSICS (Michel Lapidus)

FRIDAY, 6/5/09
11:10-12:00PM, Surge 284
DIFFERENTIAL GEOMETRY (Fred Wilhelm)
"Principles For Deforming Nonnegative Curvature"

2:10-3:00PM, Surge 268
DEFORMATION THEORY (Vasiliy Dolgushev)

3:10-4:00PM, Surge 268
COMMUTATIVE ALGEBRA (David Rush)
“Classifying Subfactor Planar Algebras”

Abstract:
I'll introduce the notion of a "subfactor planar algebra", briefly making contact with its origin in von Neumann algebras, but mostly focusing on the 2-d dimensional combinatorial diagrams that encode everything we care about! The "principal graph" is the first interesting invariant, and a little graph theory gets us started on the classification problem. Next, I'll explain the "annular Temperley-Lieb category": this is important because every subfactor planar algebra gives a representation of this category, and the irreducible representations are easy to describe. Understanding how a planar algebra breaks up into irreducible representations gives us lots of information, including obstructions that rule out some potential principal graphs, as well as clues for constructing new planar algebras. I'll end with an overview of the current classification of small index subfactor planar algebras, and a brief account of a recent construction of the long mysterious "extended Haagerup planar algebra" (joint work with Stephen Bigelow, Emily Peters, and Noah Snyder).

Wednesday, June 3, 2009
Surge 284
4:10 - 5:00 pm
Abstract: Blob homology is a construction that takes an n-manifold, and roughly, an n-category with duals, and spits out a graded vector space. It's simultaneously a generalisation of: the skein module for a TQFT, the Hochschild homology of an algebra, and the usual singular homology of a space. We're not quite sure what it's good for yet, but it has such nice formal properties, generalises so much interesting mathematics, and is in principle sufficiently computable, that it's probably going to be fun finding out!

Wednesday, June 3, 2009
Surge 277
11:10 - 12:00 pm
DEPARTMENT OF MATHEMATICS
Differential Geometry Seminar

Fred Wilhelm

“Principles For Deforming Nonnegative Curvature”

Abstract: I will discuss some abstract principles for deforming nonnegative curvature and outline the role these played in deforming the metric on the Gromoll-Meyer sphere to positive curvature. This is joint work with Peter Petersen.

Friday, June 5, 2009
Surge 284
11:10 - 12:00 pm