**Michael R. Penkava**

**Current Affiliation**
Math Department
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## EDUCATION

Ph.D. in Mathematics, University of California, Davis, Spring 1995
M.A. in Mathematics, University of California, Davis, Spring 1991

## THESIS

*Advisor:* Motohico Mulase
*Title:* Graded Algebraic Structures and the Homology of Graph Complexes

## RESEARCH INTERESTS

Deformations of Algebraic Structures, Algebraic Structures arising in Mathematical Physics, Non-Commutative Geometry
AMS subject Classification numbers, 16,17,18

## PROFESSIONAL EXPERIENCE

*Associate Professor:* Fall 2002-Present. University of Wisconsin, Eau Claire.
*Assistant Professor:* Fall 1996-Fall 2002. University of Wisconsin, Eau Claire.
*Lecturer:* Fall 1995-Summer 1996 University of California, Davis.
*Instructor:* Spring 1995-Summer 1996. Cosumnes River College, Sacramento, CA.
*Associate-In:* 1992-1995. University of California, Davis.

## SELECTED PAPERS AND PUBLICATIONS

A. Fialowski and M. Penkava *Deformation Theory of Infinity Algebras*, Journal of Algebra 255, Number 1, (2002), 59–88 math.RT/0101097

A. Fialowski and M. Penkava *Examples of Infinity and Lie Algebras and their Versal Deformations*, Geometry and Analysis on Finite- and Infinite-Dimensional Lie Groups, A. Strasburger et al. (eds.), Banach Center Publ. 55, Inst. Math., Polish Acad. Sci., 2002, 27-42, math.QA/0102140

M. Penkava and P. Vanhaecke *Hochschild Cohomology of Polynomial Algebras*, Communications in Contemporary Mathematics, Vol 3, Number 3, 365–393 (2001)

M. Penkava and P. Vanhaecke *Deformations of Polynomial Poisson Algebras*, Journal of Algebra 227, 365-393 (2000), math.QA/9804022

M. Mulase and M. Penkava *Ribbon Graphs, Quadratic Differentials on Riemann Surfaces, and Algebraic Curves Defined over* $\overline{\mathbb{Q}}$ , Asian Journal of Mathematics, Vol 2, number 4, 875-920 (1998), math-ph/9811024

M. Penkava and A. Schwarz $A_\infty$ *Algebras and the Cohomology of Moduli Spaces*, in "Dynkin Seminar on Lie Groups" (1995), hep-th/9408064

M. Penkava and A. Schwarz *On Some Algebraic Structures Arising in String Theory*, in "Perspectives in Contemporary Mathematical Physics" (1994), hep-th/9212072

**SELECTED TALKS**

American Mathematical Society Meeting, Lawrenceville, New Jersey, April 2004, "Versal Deformations of Infinity Algebras"

American Mathematical Society Meeting, Chapel Hill, North Carolina, November 2003,"Extensions of Infinity Algebras"

Mathematics Department, Kyoto University, Kyoto, Japan, December 2002
"Deformations of Infinity Algebras"

Mathematics Department, University of Minnesota, Minneapolis, April 2002
"Riemann Surfaces, Strebel Differentials and the Orbifolds of Ribbon Graph Complexes".

Mathematics Institute, Eotvös Lorand University, Budapest, Hungary, January 2002
"Riemann Surfaces and Ribbon Graph Complexes".

Conference on Lie Algebras, Santa Cruz, CA, April 2001 *Miniversal Deformations of Infinity Algebras*

Universit de Poitiers, Poitiers, France, January 2000
"Riemann Surfaces Defined over $\bar{\mathbb{Q}}$ and the Child's Drawings of Grothendieck".

Eotvös Lorand University, Budapest, Hungary, January 2000
"Versal Deformations of Infinity Algebras".

Mathematics Institute, Eotvös Lorand University, Budapest, Hungary, January 1999
"Infinity algebras, cohomology, and deformation theory".

Combined AMS and MAA meeting, Orlando, FL, January 1996
"$L_\infty$ algebras and their cohomology", Talk given in the special session, *Algebra, Algebra Cohomology, and Polynomial Identities.*

Conference on Lie Algebras, Riverside, CA, November 1995
" Lie Algebra Cohomology and Graph Complexes."

Conference on Lie Algebras, Santa Cruz, CA, April 1995.
"Cohomology of Lie algebras, $L_\infty$ algebras, and the homology of graph complexes."