

# Curriculum Vitae

## CORINA CALINESCU

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Department of Mathematics  
Yale University  
10 Hillhouse Avenue  
New Haven, CT 06520

Phone: 203-432-4172  
Fax: 203-432-7316  
[corina.calinescu@yale.edu](mailto:corina.calinescu@yale.edu)  
<http://www.math.yale.edu/~cnc25>

- Education**
- RUTGERS UNIVERSITY New Brunswick, NJ
    - Ph.D. in Mathematics, October 2006  
Advisor: James Lepowsky
  - UNIVERSITY OF BUCHAREST Bucharest, Romania
    - Master in Mathematics, January 2000
    - B.A. and Diploma in Mathematics, June 1998
- Employment**
- YALE UNIVERSITY New Haven, CT  
Gibbs Assistant Professor, July 2009 - June 2012
  - OHIO STATE UNIVERSITY Columbus, OH  
Zassenhaus Assistant Professor, September 2006 - June 2009
  - INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY Bucharest, Romania  
Research fellow, 2000 - present
- Research**
- I am an algebraist with a broad range of interests. My research focuses on representations of infinite dimensional Lie algebras, vertex operator algebras and quantum groups.
- Publications**
- C. Calinescu, J. Lepowsky and A. Milas, *Vertex-algebraic structure of the principal subspaces of level one modules for the untwisted affine Lie algebras of types A, D, E*, Journal of Algebra, 323 (2010), 167-192
  - C. Calinescu, J. Lepowsky and A. Milas, *Vertex-algebraic structure of the principal subspaces of certain  $A_1^{(1)}$ -modules, II: higher level case*, Journal of Pure and Applied Algebra 212 (2008), 1928-1950
  - C. Calinescu, J. Lepowsky and A. Milas, *Vertex-algebraic structure of the principal subspaces of certain  $A_1^{(1)}$ -modules, I: level one case*, International Journal of Mathematics 19 (2008), 71-92
  - C. Calinescu, *Intertwining vertex operators and certain representations of  $\widehat{sl}(n)$* , Communications in Contemporary Mathematics 10 (2008), 47-79

- C. Calinescu, *Principal subspaces of higher-level standard  $\widehat{sl(3)}$ -modules*, Journal of Pure and Applied Algebra 210 (2007), 559-575
- C. Calinescu, *On intertwining operators and recursions*, in: Lie Algebras, Vertex Operator Algebras and Their Applications, a Conference in Honor of J. Lepowsky and R. Wilson, ed. by Y.-Z. Huang and K. C. Misra, Contemporary Mathematics, Amer. Math. Soc., Providence, RI, 2007, 289-301
- C. Calinescu, S. Dascalescu, A. Masuoka and C. Menini, *Quantum lines over non-cocommutative cosemisimple Hopf algebras*, Journal of Algebra 273 (2004), 753-779
- C. Calinescu, *On the bijectivity of the antipode in a co-Frobenius Hopf algebra*, Bull. Math. Soc. Sci. Math. Roumanie (N. S.) 44 (92) (2001), no. 1, 59-62

**Awards,  
Fellowships**

- Travel grant, Ohio State University, Spring 2007
- Summer Research Award, Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Summer 2006
- Research Assistantship, Rutgers University, Summer 2005
- Winter Research Award, Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Winter 2004
- Weill Fellowship, Rutgers University, Summer 2002
- Teaching Assistantship, Rutgers University, 2001-2006
- World Bank Fellowship, Free University of Brussels, Belgium, 2000
- European Union “Socrates” Fellowship, University of Antwerp, Belgium, 1998
- National Merit Scholarship, University of Bucharest, 1994-1998

**Invited  
Talks**

- Algebraic and Combinatorial Approaches to Representation Theory, satellite conference of the ICM, India, August 2010 (could not attend)
- Geometry, Symmetry and Physics Seminar, Yale University, September 2009
- New York Algebra Colloquium, CUNY-Graduate Center, May 2009
- Lie Groups, Lie Algebras and their Representations, University of Southern California, May 2009
- Lie Groups/Quantum Mathematics Seminar, Rutgers University, February 2009
- Algebra and Combinatorics Seminar, North Carolina State University, October 2008
- International Conference on Vertex Operator Algebras and Related Areas, Illinois State University, July 2008
- Algebra Seminar, Rutgers University, April 2007
- Combinatorics Seminar, Ohio State University, October 2006
- Quantum Mathematics Seminar, Rutgers University, September 2006
- Special Session on Theory of Infinite-Dimensional Lie Algebras, Vertex Operator Algebras, and Related Topics, AMS Meeting, Bard College, October 2005

- Quantum Mathematics Seminar, Rutgers University, September 2005
- Workshop on Groups and Algebras in  $M$ -theory, Rutgers University, June 2005
- Lie Algebras, Vertex Operator Algebras and Their Applications, A Conference in Honor of James Lepowsky and Robert Wilson on Their 60th Birthdays, North Carolina State University, May 2005
- Special Session on Hopf Algebras and Quantum Groups, AMS Meeting, Courant Institute of Mathematics, April 2003
- Conference on Hopf Algebras and Quantum Groups, Royal Belgian Academy, Brussels, Belgium, April 2001

**Teaching  
Experience**

- **Instructor**, Yale University
  - Solitons and Infinite Dimensional Algebras, graduate course (Fall 2010)
  - Calculus II (Spring 2010)
  - Vertex Operator Algebras, graduate course (Spring 2010)
  - Modern Algebra I, joint graduate/undergraduate course (Fall 2009)
- **Instructor**, Ohio State University
  - Linear Algebra (Spring 2009)
  - Introductory Analysis (Autumn 2008)
  - Introductory Linear Algebra (Spring 2008, Spring 2009)
  - Ordinary and Partial Differential Equations (Autumn 2007)
  - Linear Algebra for Applications (Winter 2007)
  - Algebra and Trigonometry and Their Applications (Autumn 2006)
- **Instructor**, Rutgers University
  - Introductory Linear Algebra (Summer 2004)
  - Calculus I (Summer 2003)
- **Teaching Assistant**, Rutgers University
  - Head Teaching Assistant for Calculus I course (Fall 2004)
  - Various Calculus and Differential Equations courses (2002–2006)
- **Teaching Assistant**, University of Bucharest
  - Introduction to Algebra (Fall 1999 and Spring 2000)

**Service**

- Co-organizer of the "Geometry, Symmetry and Physics Seminar" at Yale, 2009-2010
- Organizer of "Junior Algebra Seminar", Rutgers University, 2003-2004, 2004-2005
- Graduate Student-Faculty Liaison Committee, Rutgers University
- Referee for academic journals