Veronika PEDIĆ TOMIĆ

PERSONAL DATA

PLACE AND DATE OF BIRTH:	Split, Croatia | 06 October 1993
CITIZENSHIP:	Croatian
OFFICE ADDRESS:	University of Zagreb, Mathematics Department,
	Bijenička cesta 30, 10000 Zagreb, Croatia
EMAIL:	veronika.pedic@gmail.com, veronika.pedic@math.hr
WEBPAGE:	https://web.math.pmf.unizg.hr/~vpedic/
CIVIL STATUS:	Married, two children

ACADEMIC DEGREES

PH.D.	University of Zagreb, Croatia, 2021 (summa cum laude)
	Advisor: Prof. Dražen Adamović
	Thesis: Whittaker modules and fusion rules for the Weyl vertex algebra, affine vertex algebras and their orbifolds
M.SC.	University of Zagreb, Croatia, 2017 (summa cum laude)
B.SC.	University of Zagreb, Croatia, 2015

PROFESSIONAL EXPERIENCE

JAN 2024 -	Assistant Professor, Department of Mathematics, Faculty of Science, University of Zagreb, Croatia
DEC 2021 - DEC 2023	Postdoctoral Researcher, Department of Mathematics, Faculty of Science, University of Zagreb, Croatia
JAN 2018 - NOV 2021	Research Assistant, Department of Mathematics, Faculty of Science, University of Zagreb, Croatia
SEP 2017 - SEP 2018	Teaching Assistant, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia

PUBLICATIONS

- D. Adamovic, C. H. Lam, V. Pedic, N. Yu, *On irreducibility of modules of Whittaker type: twisted modules and nonabelian orbifolds*, arXiv:2212.14137

- D. Adamovic, V. Pedic Tomic, *Whittaker modules for $\widehat{\mathfrak{gl}}$ and $W_{1+\infty}$–modules which are not tensor products* (2021), Letters in Mathematical Physics 113 (2023), no. 2, 39 pp.

- K. Barron, K. Batistelli, F. Orosz Hunziker, V. Pedic Tomic, G. Yamskulna, *On rationality of $\mathbb{C}$-graded vertex algebras and applications to Weyl vertex algebras under conformal flow*, Journal of Mathematical Physics, 63 (2022), no. 9, 091706, 25 pp.

- D. Adamovic, V. Pedic, *On fusion rules and intertwining operators for the Weyl vertex algebra*, Journal of Mathematical Physics 60 (2019), no. 8, 081701, 18 pp.

- D. Adamovic, C. H. Lam, V. Pedic, N. Yu, *On irreducibility of modules of Whittaker type for cyclic orbifold vertex algebra*, Journal of Algebra 539 (2019) 1-23

PAPERS IN PREPARATION

- D. Adamovic, V. Pedic, *On fusion rules for certain vertex algebras: typical modules for the singlet $\mathcal{M}(p)$*

ORGANIZATION

JAN 2018 -	Secretary of the Seminar for Algebra, University of Zagreb
FEB 2020	Symposium of PhD students of the Faculty of natural sciences, University of Zagreb, Coratia
SEP 2013 - SEP 2015	International mathematical competition *Tournament of towns*, Zagreb, Croatia

INVITED TALKS

MAR 2025   University of Illinois, USA,

On Whittaker modules for Weyl vertex algebra orbifolds

DEC 2023   La Sapienza, Rome, Italy

On Whittaker modules for Weyl vertex algebra orbifolds

JUN 2023   Inter-University Centre, Dubrovnik, Croatia

Whittaker modules for $\widehat{\mathfrak{gl}}$ and $W_{1+\infty}$–modules which are not tensor products

OCT 2021   Rocky Mountain Representation Theory Seminar, USA

Representation theory and fusion rules for the Weyl vertex algebra and beyond

SEP 2021   TU Darmstadt, Germany,

$\beta\gamma$ ghosts: Whittaker modules and fusion rules

APR 2021   CUNY Graduate Center and New York City College of Technology, USA,

Weyl vertex algebra: Whittaker modules and fusion rules

NOV 2020   University of Illinois, USA,

Beta-gamma ghost: Whittaker modules and fusion rules

JUN 2019   Inter-University Centre, Dubrovnik, Croatia,

On irreducibility of Whittaker modules for cyclic orbifold vertex algebras

JUN 2019   Nankai University, Tianjin, China,

On fusion rules for the Weyl vertex algebra modules

NOV 2018   University of Split, Split, Croatia,

On irreducibility of Whittaker modules for cyclic orbifold vertex algebras

and application to the Weyl algebra

Contributed talks

Apr 2025   Stony Brook University, New York, USA

Fusion rules for the $\beta - \gamma$ system and Lie superalgebra $\mathfrak{gl}(1|1)$

Nov 2023   Cardiff University, Cardiff, UK

Vertex (operator) algebras and their orbifolds

Aug 2023   BIRS, Canada

Are bosonic ghosts rational beings?

Jun 2022   University of Split, Croatia,

Whittaker modules for $\widehat{\mathfrak{gl}}$ and $\mathcal{W}_{1+\infty}$–modules which are not tensor products

Apr 2021   University of Copenhagen, Denmark,

Fusion rules for vertex algebras and applications (poster)

Sep 2020   BIRS online conference, Canada

Fusion rules for the $\beta - \gamma$ system and Lie superalgebra $\mathfrak{gl}(1|1)$ (poster)

Aug 2019   ETH, Zürich, Switzerland,

On fusion rules for the Weyl vertex algebra modules

May 2019   University of Lille, Lille, France,

On fusion rules for the Weyl vertex algebra modules

Feb 2019   University of Zagreb, Zagreb, Croatia,

On irreducibility of Whittaker modules for cyclic orbifold vertex algebras and application to the Weyl algebra

Jun 2018   University of Georgia, Athens, USA,

Weight and Whittaker modules for the Weyl vertex algebra

Conferences, Workshops and Summer Schools

Mar 31 - Apr 4 2025	Symplectic Singularities, Supersymmetric QFT, and Geometric Representation Theory, Simons Center for Geometry and Physics, New York, USA
Dec 10-16 2023	Vertex algebras, Infinite-dimensional Lie algebras and related topics, La Sapienza, Rome, Italy
Aug 13-18, 2023	Women in Mathematical Physics II, BIRS, Canada
Jun 25-Jul 1, 2023	Representation Theory XVIII, Inter-University Centre, Dubrovnik, Croatia
Jun 15-18, 2022	7th Croatian Mathematical Congress, University of Split, Croatia (online)
Mar 21-25, 2022	International Workshop on Representation Theory, Vertex and Chiral Algebras, IMPA, Rio de Janeiro, Brasil (online)
Sep 21-24, 2021	Conference on vertex algebras and related topics, TU Darmstadt, Germany (online)
Apr 21-23, 2021	Graduate student meeting on Applied Algebra and Combinatorics, University of Copenhagen, Denmark (online)
Apr 9-10, 2021	Vertex Operator Algebras and Related Topics, CUNY Graduate Center and New York City College of Technology, New York, USA (online)
Nov 5, 2020	ISU algebra seminar, University of Illinois, Illinois, USA (online)
Sep 21-22, 2020	Women in Mathematical Physics, BIRS, Banff, Canada (online)
Jan 17, 2020	Seminar zur konformen Feldtheorie, TU Darmstadt, Darmstadt, Germany
Aug 12-16, 2019	Representation Theory and Integrable Systems, ETH, Zürich, Switzerland
Jun 23-29, 2019	Representation Theory XVI, ICM, Dubrovnik, Croatia
Jun 9-15, 2019	The Mathematical Foundations of CFT and Related Topics, Nankai University, Tianjin, China
May 27-31, 2019	Geometric and automorphic aspects of W-algebras, University of Lille, Lille, France
Feb 22, 2019	Symposium of PhD students of the Faculty of natural sciences, University of Zagreb, Croatia
Jan 31-Feb 1, 2019	Enhancing representation theory, noncommutative algebra and geometry workshop, ICMS, Edinburgh, UK

Nov 22-24, 2018	Workshop on vertex algebras and infinite-dimensional Lie algebras, University of Split, Croatia
Jul 9-13, 2018	Vertex Operator Algebras and Symmetries, University of Kyoto, Kyoto, Japan
Jul 2-6, 2018	Vertex Operator Algebras and Conformal Field Theory, University of Kyoto, Kyoto, Japan
Jun 10-12, 2018	Southeast Lie Theory Workshop X, University of Georgia, Athens, Georgia, USA
Jun 4-9, 2018	2018 Summer School on Lie Theory, University of Georgia, Athens, Georgia, USA
May 24-27, 2018	Vertex algebras and related topics, University of Zagreb, Zagreb, Croatia
Jul 3-7, 2017	Current Topics in the Theory of Algebraic Groups, Université de Bourgogne, Dijon, France

Grants, Scholarships and Awards

2021 -	Scientific Center of Excellence for Quantum and Complex Systems, and Representations of Lie Algebras (QuantiXLie), member
2017 - 2021	Scientific Center of Excellence for Quantum and Complex Systems, and Representations of Lie Algebras (QuantiXLie), member
2017	Rector's award for year 2016./17. for joint work *Rational functions on curves and application to the field of complex numbers*
2017	Department of Mathematics award for the best students of finishing year of Master's Degree
2015	Department of Mathematics award for the best students of finishing year of Bachelor's Degree
2010-2017	Scholarship of the City of Zagreb for high school and University students
2012	Electional competition for the Olympiad in Physics
2012	International Tournament of young matematicians, Orsay, France
2007-2012	High school competitions, national level: Mathematics (2nd award), Physics (2nd award), Logic, Latin, Croatian

Teaching

2018/19, 2019/20, 2020/21	Algebraic structures
2018/19, 2019/20	Analytic geometry
2021/22, 2023/24	Complex analysis
2024/25	Linear algebra 1
2024/25	Linear algebra 2
2024/25	Mathematical Analysis 1
2019/20	Elementary geometry
2023/24	Elementary mathematics
2017/18	Methods of mathematical physics
2017/18	Elementary number theory
2023/24	Constructive methods in geometry
2017/18	Probability and statistics (Faculty of electrical engineering and computing)
2017/18	Mathematics 1 (Faculty of electrical engineering and computing)

Languages

CROATIAN:	Native speaker
ENGLISH:	Fluent
GERMAN:	Advanced
SPANISH:	Basic

Computer Skills

INTERMEDIATE KNOWLEDGE:	C, C++, Python, R, SQL, LaTeX
BASIC KNOWLEDGE:	HTML

Other Skills

High school degree in piano and theory of music