

# THE UNIVERSITY OF BRITISH COLUMBIA

## *Curriculum Vitae for Faculty Members*

**Date:** 3 April 2025

**Initials:**

**1. SURNAME:** Rozali

**FIRST NAME:** Moshe

**2. DEPARTMENT/SCHOOL:** Physics

**3. FACULTY:** Science

**4. PRESENT RANK:** Professor

**SINCE:** 2013

### 5. POST-SECONDARY EDUCATION

University or Institution	Degree	Subject Area	Dates
Tel-Aviv University	BSc	Mathematics, Physics	1987–1990
University of Texas	PhD	Physics	1991–1997

### 6. EMPLOYMENT RECORD

*Prior to coming to UBC*

University, Company or Organization	Rank or Title	Dates
University of Illinois	Research Fellow	1998
Rutgers University	Research Fellow	1999–2001

*(b) At UBC*

Rank or Title	Dates
Assistant Professor	2001–2007
Associate Professor	2007–2013
Professor	Since 2013

- Date of granting of tenure at U.B.C.: September 2007.

### 7. LEAVES OF ABSENCE

University, Company or Organization at which Leave was taken	Type of Leave	Dates
N/A	Parental	Jan–Apr, Sep–Dec 2014
	Sabbatical	Jan–June 2017

### 8. TEACHING

*Courses Taught at UBC*

<b>Session</b>	<b>Course Num- ber</b>	<b>Hours</b>	<b>Class Size</b>	<b>Lecture Hours</b>	<b>Tutorials</b>	<b>Labs</b>	<b>Other</b>
Spring 2002	508	39	7	39			
Fall 2002	526	39	8	39			
Spring 2003	401	39	9	39			
Fall 2003	526	39	11	39			
Spring 2004	401	39	21	39			
Fall 2004	526	39	25	39			
Summer 2005	250	39	60	39	12		
Fall 2005	504	39	20	39			
Summer 2006	250	39	60	39	12		
Fall 2006	504	39	20	39			
Spring 2007	529	39	20	39			
Summer 2007	250	39	60	39	12		
Fall 2007	504	39	20	39			
Spring 2008	402	39	30	39			
Spring 2008	529b	39	10	39			
Fall 2008	526	39	22	39			
Spring 2009	402	39	30	39			
Fall 2009	526	39	25	39			
Spring 2010	402	39	30	39			
Fall 2010	407	39	36	39			
Spring 2011	402	39	37	39			
Fall 2011	403	39	35	39			
Spring 2012	407	39	35	39			
Fall 2012	403	39	30	39			
Spring 2013	407	39	46	39			
Fall 2013	407	39	48	39			
Spring 2015	216	65	50	39	26		
Fall 2015	410	50		39			
Spring 2016	216	120		39	26		
Fall 2016	410	50		39			
Fall 2017	410	70		39			
Spring 2018	529	9		39			
Fall 2018	410	60		39			
Spring 2019	508	6		39			
Fall 2019	170	160		39			
Spring 2020	508	14		39			
Fall 2020	170	220		39			
Spring 2021	508	12		39			
Fall 2021	170	200		39			
Spring 2022	508	6		39			
Fall 2022	407	42		39			
Spring 2023	529	12		39			
Fall 2023	407	40		39			
Spring 2024	508	10		39			

Session	Course Number	Hours	Class Size	Lecture Hours	Tutorials	Labs	Other
Fall 2024	407	40		39			
Spring 2025	203	140		39			

(**Course names:** Physics 170 – Mechanics, Phys 203 – Thermal Physics, Phys 216 – Mechanics, Phys 250 – Modern Physics, Phys 401 – Electricity and Magnetism, Phys 402 – Applications of Quantum Mechanics, Phys 403 – Statistical Mechanics, Phys 407 – General Relativity, Phys 410 – Computational Physics, Phys 504 – Relativity and Electromagnetism, Physics 508 – Quantum Field Theory, Phys 526 – Quantum Electrodynamics, Phys 529 – String Theory, Phys 529b – Gravitational Aspects of String Theory)

**(b) *Highly Qualified Personnel Supervised***

**Graduate Students:**

Student Name	Program Type	Starting Year	Finishing Year	Supervisory Role
Philip DeBoer	PhD	2001	2005	Supervisor
Karene Chu	MSc	2001	2004	Supervisor
Jianyang He	MSc	2003	2005	Supervisor
Callum Quigley	MSc	2003	2005	Supervisor
Marc Lalancette	MSc	2005	2008	Supervisor
Lionel Brits	MSc	2005	2007	Supervisor
Jianyang He	PhD	2005	2010	Supervisor
Lionel Brits	PhD	2007	(did not complete)	Supervisor
Alex Rohvarger	MSc	2010	2012	Co-Supervisor
Darren Smyth	PhD	2010	2016	Supervisor
Anson Wong	MSc	2012	2014	Supervisor
Alexandre Vincart-Emard	PhD	2012	2017	Supervisor
Anson Wong	PhD	2014	(did not complete)	Supervisor
Wyatt Reeves	MSc	2017	2018	Supervisor
Sean Cooper	MSc	2017	(did not complete)	Supervisor
Wyatt Reeves	PhD	2019	2023	Supervisor
Sean Cooper	PhD	2019	(did not complete)	Supervisor
Kris Samant	MSc	2023	(did not complete)	Supervisor
Chuanxin Cui	MSc	2024		Supervisor

(Additionally I am on the supervisory committee of about 6–8 PhD students at any given time).

**Undergraduate Students:**

- Marc Lalancette (Summer 2003 – Matrix Models)
- Danica Marsden (Fall 2004 – String Cosmology)

- Sara Bartolucci (Imperial College), Summer 2016
- Robert King (Imperial College), Summer 2019
- Phillip Bemont, Summer 2019, and 449 2019–2020

#### **Postdoctoral Fellows:**

Our string theory group supported the following postdocs jointly:

- Kazuyuki Furuuchi (2001–2004)
- Ehud Schreiber (2002–2004)
- Dominic Brecher (2002–2005)
- Kazumi Okuyama (2004–2006)
- Paul Koerber (2004–2005)
- Pallab Basu (2007–2010)
- Anindya Mukherjee (2007–2010)
- Klaus Larjo (2008–2011)
- Joshua Davis (2009–2011)
- Tommy Levi (2009–2012)
- Bartek Czech (2009–2012)
- Nima Lashkari (2012–2015)
- Evgeny Sorkin (2012–2013)
- Omid Saremi (2013–2015)
- Josephine Suh (2015–2017)
- Jaehoon Lee (2015–2017)
- Benson Way (2016–2019)
- Eliot Hijano (2016–2019)
- Felix Haehl (2016–2019)
- Tarek Anous (2016–2019)
- Eric Mintun (2016–2019)
- Jason Pollack (2017–2020)
- James Sully (2018–2022)
- Lampros Lamprou (2020–2023)
- Arjun Kar (2020–2023)
- Charles Marteau (2020–2023)
- Aidan Chatwin-Davies (2021–2023)
- Felipe Rosso (2021–2023)
- Panagiotis Betzios (2021–2024)
- Jeremy van der Heijden (2024–)
- Sean McBride (2024–)
- Alejandro Vilar Lopez (2024–)

*Visiting Lecturer (indicate university/organization and dates)*

Long Term Visitor, Perimeter Institute for Theoretical Physics, January – May 2005, January – May 2006.

Visiting Scientist, Syracuse University, 2004–2006.

#### **(d) *Other***

Thesis Examiner, Perimeter Scholars International, 2011, 2013.

## 9. SCHOLARLY AND PROFESSIONAL ACTIVITIES

*Research or equivalent grants (indicates under COMP whether grants were obtained competitively (C) or non-competitively (NC))*

Granting Agency	Subject	COMP	\$ Per Year	Year	Principal Investigator	Co-Investigator(s)
NSERC	Applications of String Theory	C	48000	2002–2003	Moshe Rozali	None
NSERC	Applications of String Theory	C	60000	2004–2006	Moshe Rozali	None
NSERC	Applications of String Theory	C	70000	2007–2011	Moshe Rozali	None
NSERC	Development and Applications of String Theory	C	70000	2012–2016	Moshe Rozali	None
NSERC	Big data analysis of network metadata for optical networking systems	C	25000	2015	Moshe Rozali	Optigo Networks
NSERC	Applications of String Theory	C	70000	2017–2022	Moshe Rozali	None
NSERC	String theory, gravity and strongly interacting systems	C	92000	2023–2028	Moshe Rozali	None

### *Invited Presentations*

Date	Location	Title	Conference
April 1997	Stanford University	Matrix Theory and U-Duality in Seven Dimensions	
April 1998	ICTP, Trieste, Italy	On the (2,0) Theory in Six Dimensions	Physics of Super-Fivebranes
October 1998	University of Texas at Austin	Brane Boxes, Anomalies, Bending and Tadpoles	
March 2000	University of Minnesota	D-Branes in General String Backgrounds	
May 2000	University of Chicago	Near Hagedorn Dynamics of NS Fivebranes	
October 2000	Stanford University	Near Hagedorn Dynamics of NS Fivebranes	

<b>Date</b>	<b>Location</b>	<b>Title</b>	<b>Conference</b>
December 2000	Harvard University	Thermodynamics of Little String Theories	
January 2001	University of Texas at Austin	Thermodynamics of Non-Gravitational String Theories	
February 2001	Cornell University	High Energy Scattering in Noncommutative Field Theory	
February 2001	University of Minnesota	Beyond QFT: In Search of a New Correspondence Principle (colloquium)	
March 2001	University of British Columbia	Beyond QFT: In Search of a New Correspondence Principle (colloquium)	
March 2001	University of British Columbia	Thermodynamics of Non-Gravitational String Theories	
March 2001	UC, Irvine	Beyond QFT: In Search of a New Correspondence Principle (colloquium)	
June 2001	KIAS, Seoul, Korea	Thermodynamics of Little String Theory	
June 2001	KIAS, Seoul, Korea	Gauge Invariant Correlators in Noncommutative Gauge Theory	3rd KIAS-APCTP workshop on string theory
October 2001	University of Chicago	D-Branes on AdS3	
February 2002	TRIUMF	Noncommutative Field Theories – a Survey	
June 2002	April Point, Canada	PP Waves and Holography	CIAR Meeting
June 2002	Neve Shalom, Israel	Plane Waves and Holography	
January 2003	University of British Columbia	Introduction to String Theory (Undergraduate Physics Society)	
February 2003	KIAS, Seoul, Korea	Little String Theory, Lecture Series	KIAS-APCTP 7th Winter School
March 2003	University of British Columbia	String Theory for Astronomers (colloquium)	
December 2003	Neve Shalom, Israel	Closed Timelike Curves and Holography in Compact Plane Waves	
June 2004	Banff	Closed Strings in Misner Space	New Horizons in String Cosmology

<b>Date</b>	<b>Location</b>	<b>Title</b>	<b>Conference</b>
September 2004	Syracuse University	Cosmological Production of Winding Strings	
October 2004	Cornell University	Cosmological Production of Winding Strings	
November 2004	MIT	On Charged Black Holes in AdS Space	
February 2005	Perimeter	On Charged Black Holes in AdS Space	
April 2005	McGill	Singularity Resolution in Perturbative String Theory	Brane Gas Cosmology Conference
May 2005	UBC	Helicity Amplitudes in Supersymmetric gauge Theories	CAP meeting
April 2006	Syracuse University	Helicity amplitudes	
April 2006	Perimeter Institute	Hairpin Branes and D-Branes Behind the Horizon	
April 2006	Perimeter Institute	Hairpin Branes and D-Branes Behind the Horizon	Theory Canada II
April 2007	Weizmann Institute	Bubbles of Nothing in AdS/CFT	
June 2007	Morelia, Mexico	Background Independence in String Theory	Loops 2007
February 2008	University of Southern California	Cold Nuclear matter in Holographic QCD	
May 2008	INT, Seattle	Cold Nuclear matter in Holographic QCD	From Strings to Things
June 2008	University of Montreal	Cold Nuclear matter in Holographic QCD	Theory Canada 4
December 2010	Joint Theory Seminar, Neve Shalom, Israel	Holographic phase competition	
January 2011	INT Seattle	Holographic phase competition	
February 2011	University of Pennsylvania	Holographic phase competition	
February 2011	City University of New York	Holographic phase competition	
March 2012	Cambridge, UK	Amplitudes for Fivebranes	Applications of Branes in String and M-Theory
March 2012	Imperial College, London	Amplitudes for Fivebranes	

<b>Date</b>	<b>Location</b>	<b>Title</b>	<b>Conference</b>
December 2012	M.I.T.	Inhomogeneous Holography	
February 2013	Banff	Compressible Matter at a Holographic Interface	Holography and Applied String Theory
July 2013	Benasque, Spain	Striped Order in AdS/CFT	Gravity – New Perspectives from Strings and Higher Dimensions
August 2013	IPMU, University of Tokyo, Japan	Inhomogeneous Holography	
September 2013	Cambridge, UK		Mathematics and Physics of the Holographic Principle
December 2013	IPMU, University of Tokyo, Japan	Holographic Topological Insulators and Superconductors	
June 2014	YITP, Kyoto	Holographic Edge States	Holographic Vistas on Gravity and Strings
December 2014	CERN	Driven Holographic CFTs	Institute for Numerical Holography
April 2015	University of Washington	Driven Holographic CFTs	
June 2015	Neve Shalom, Israel	Driven Holographic CFTs	
March 2016	Banff	Particle Production at Strong Coupling	Gauge/Gravity Duality and Condensed Matter Physics
April 2016	Copenhagen	Particle Production at Strong Coupling	Current Themes in Holography
May 2016	Technion, Israel	Evolution of Holographic Entanglement Entropy	Numerical Methods in Asymptotically AdS Spaces
June 2016	Kyoto	Entanglement Propagation	Quantum Matter, Spacetime and Information
January 2017	Leiden	Generalizations of the SYK model	Disorder in QFT and Holography
May 2017	Florence	Quenches in the confined phase	Progress in AdS3/CFT2 holography
November 2017	Stony Brook	Quenches in the confined phase	From MBL to Black Holes
April 2018	UCLA	Fine Grained Chaos in AdS2 gravity	



<b>Date</b>	<b>Location</b>	<b>Title</b>	<b>Conference</b>
May 2018	Mainz, Germany	Fine Grained Chaos in AdS2 gravity	Modern techniques in CFT and AdS
August 2018	Wurzburg, Germany	Fine Grained Chaos in AdS2 gravity	Gauge-Gravity Duality 2018
August 2018	Nordita, Sweden	Fine Grained Chaos in AdS2 gravity	Bounding transport and chaos
April 2019	Neve Shalom, Israel	Effective Field Theories of Chaotic CFTs	
May 2020	Spain (virtually)	ETH and disorder averaging in gravity	Holomatter
October 2020	UC Davis (virtually)	ETH and disorder averaging in gravity	
March 2021	Dublin (virtually)	ETH and disorder averaging in gravity	
October 2021	Capetown (virtually)	Random matrix theory for complexity growth and black hole interiors	
November 2021	Stony Brook (virtually)	Random matrix theory for complexity growth and black hole interiors	
February 2022	Cyprus (virtually)	Random matrix theory for complexity growth and black hole interiors	
May 2023	Neve Shalom, Israel	Spectral correlations in chaotic CFTs	
August 2023	Mainz, Germany	Spectral correlations in chaotic CFTs	Thermalization in CFTs
March 2024	Princeton, NJ	Randomness in CFTs	Random Physics
May 2024	Seattle	Randomness in CFTs	PNW seminar
December 2024	Caltech	Randomness in CFTs	
June 2025	Pollica, Italy	Statistics of conformal field theories	Physics Sessions 2025
July 2025	Natal, Brazil	Randomness in CFTs	Quantum Gravity, Holography and Quantum Information
December 2025	Neve Shalom, Israel	Statistics of conformal field theories	
December 2025	Weizmann Institute	Matter correlators in sine-dilaton gravity	
December 2025	Cologne, Germany	Statistics of conformal field theories	Field Theories of Many-Body Quantum Chaos, Holography and Quantum Information

(Several conference talks cancelled in 2020/1 due to covid-19)

### *Conference Participation and Organization*

I have been active in co-organizing workshops, conferences and summer schools listed below. Most notable is the summer school series “Strings, Gravity and Cosmology” established after my arrival at UBC. In the schools we had about a dozen external speakers and 80–90 students.

- Pacific Northwest Seminar, March 2002, UBC, organizer.
- Brane-world and Supersymmetry, July 2002, UBC, organizer.
- Recent Developments in String Theory, March 2003, Banff, organizer.
- First Summer School “Strings Gravity and Cosmology”, July 2003, chair of organizing committee.
- Pacific Northwest Seminar, November 2003, UBC, organizer.
- String Field Camp, July 2004, Banff, organizer.
- Second Summer School “Strings Gravity and Cosmology”, UBC, August 2004, organizer.
- Third Summer School “Strings Gravity and Cosmology”, Perimeter institute, June 2005, organizer.
- Fourth Summer School “Strings Gravity and Cosmology”, UBC, August 2006, organizer.
- Sixth Summer school, UBC, 2008.
- Holographic Methods in Condensed Matter Physics, Banff, February 2016.
- Quantum chaos and holography, Dresden May 2022 (originally Banff March 2021).
- Quantum chaos and holography II, Wurzburg May 2024.
- Quantum chaos and holography III, Mainz June 2025.

I list below participation in conferences and workshops, which are forums for informal discussions open by invitation only to a select and fairly small group of participants.

<b>Date</b>	<b>Name</b>	<b>Location</b>
April 1998	Super-Fivebranes and Physics in 5+1 Dimensions conference	ICTP, Trieste
September 1998	M-Theory and Black Holes	Aspen
May 1999	Mathematics from Physics	University of Illinois
July 1999	String Theory, Gauge Theory and Gravity	Amsterdam
August 2000	String Dualities and Their Applications	Aspen
March 2001	M-Theory	KITP, Santa-Barbara
August 2001	Extreme String Theory	Aspen
January 2002	Stanford-Weizmann meeting	Stanford
August 2003	Time and String Theory	Aspen
June 2004	New horizons in String Cosmology	Banff
October 2004	Strings and QCD	KITP, Santa-Barbara
January 2005	Twistor String Theory	Oxford
March 2005	String Phenomenology	Perimeter
May 2005	Brane Gas Cosmology	McGill
May 2005	Gravitational Aspects of String Theory	Toronto
December 2004–May 2005	The Geometry of String Theory	Perimeter Institute
August 2005	Supercosmology	Aspen

<b>Date</b>	<b>Name</b>	<b>Location</b>
January 2007	Quantum Nature of Spacetime Singularities	Santa Barbara
May 2009	Fundamental Aspects of Superstring Theory	Santa Barbara
June 2009	Tom Banks/Willy Fischler 60th birthday conference	Santa Cruz
August 2011	Holography and Singularities in String Theory and Quantum Gravity	Aspen, Colorado
November 2011	Amplitudes 2011 conference (session chair)	University of Michigan
March 2012	Applications of Branes in String and M-Theory	Cambridge, UK
February 2013	Holography and Applied String Theory	Banff
July 2013	Gravity – New Perspectives from Strings and Higher Dimensions	Benasque, Spain
September 2013	Mathematics and Physics of the Holographic Principle	Cambridge, UK
June 2014	Holographic Vistas on Gravity and Strings	Kyoto, Japan
December 2014	Institute for Numerical Holography	CERN
July 2015	Gravity – New Perspectives from Strings and Higher Dimensions	Benasque, Spain
August 2015	Beyond Quasiparticles	Aspen
July 2017	Gravity – New Perspectives from Strings and Higher Dimensions	Benasque, Spain
June 2018		Florence, Italy
March 2019	Many-body quantum chaos	Aspen
April 2019	Machine learning and physics	Microsoft
July 2019	Strings workshops	Amsterdam
August 2019	Quantum information in quantum gravity 5	Davis
July 2022	Strings workshop	Amsterdam
August 2022	Quantum chaos	Aspen
May 2023	The physics sessions	Crete
July 2023	Thermalization in CFTs	Mainz
March 2024	Random Physics	Princeton
May 2024	Speakable and unspeakable in quantum gravity	Saclay
June 2024	Strings workshop	Amsterdam
June 2025	The physics sessions	Italy
June 2025	The holographic universe	Belgium
July 2025	Quantum Gravity, Holography and Quantum Information	Brazil

(everything in 2020 and 2021 cancelled, I did not list a few online workshops)

## **10. SERVICE TO THE UNIVERSITY**

### ***(a) Memberships on committees, including offices held and dates***

- Hiring Committee, Particle theory search, 2004.
- Graduate Awards Chair 2005–2008.
- Colloquium Committee, 2008–present, chair 2009.
- Department newsletter editor, 2010–present.
- Committee of Initial Appointments, 2008–present. Chair, since 2023.
- Committee of Promotion and Tenure, 2008–present.
- Graduate Admissions, 2012–present

### ***(b) Other service, including dates***

- Member of Organizing committee of the department retreat, April 2002.
- Organizer, string theory seminar 2001–2002.
- Organizer, theory seminar, 2003.

## **11. SERVICE TO THE COMMUNITY**

### ***(a) Memberships on scholarly societies, including offices held and dates:***

Member of The Foundational Questions Institute (FQXI), starting spring 2011:

FQXI is a private institute dedicated to exploring issues in the forefront of Physics. Membership, which is extended by invitation only, is relatively small, consisting of a few dozen members. Members are invited to FQXI conferences and workshops and are entitled to apply to “mini-grants” – grant competitions open to members only.

Member of Compute Canada and Westgrid user.

Member of American Physical Society, Canadian Association of Physics, Institute of Particle Physics, Institute of Physics (UK).

### ***(b) Memberships on scholarly committees, including offices held and dates***

Member of NSERC’s ad hoc committee for long range planning for theoretical subatomic physics in Canada, 2005–2006.

Member of IPP postdoc selection committee, 2007.

Member of NSERC’s grant selection committee 19 (subatomic physics), 2008–2011, ad hoc member 2014, 2016.

The subatomic section is unique in NSERC is assigning grants (including grant amounts) from a fixed envelope. The membership rotates every 3 years and includes, in addition to making grant decisions, membership in standing review committees for large facilities (e.g. TRIUMF or ATLAS Canada), and participation in departmental visits across Canada.

### ***(c) Reviewer (journal, agency, etc. including dates)***

Referee for various journals including for example: Physics Review, Nuclear Physics B, Journal of High Energy Physics, Journal of Canadian Physics, Classical and Quantum Gravity, and others.

Referee for NSERC discovery grant proposals.

Referee for DOE grant proposals (early career, theoretical condensed matter sections).

(d) *External examiner (indicate universities and dates)*

- David Winters, McGill University, 2003.
- Aaron James Berndsen, McGill, 2007.

## **12. AWARDS AND DISTINCTIONS**

(a) *Awards for Teaching (indicate name of award, awarding organizations, date)*

(b) *Awards for Scholarship (indicate name of award, awarding organizations, date)*

First prize essay in the gravity foundation essay contest (with V. Balasubramanian and D. Marolf), April 2006.

The gravity research foundation maintains an annual contest for research essays on topics related to gravitational physics. The essays are received from all over the world and are judged by a committee of professional physicists. Past winners include Steven Hawking, Roger Penrose, Paul Steinhardt, Lawrence Krauss, Ilya Prigogine, A.M. Polyakov, and other prominent physicists.

Third prize essay in the FQXI essay competition, Spring 2011.

The Foundational Questions Institute maintains occasional contests for essays on the foundations of physics and related topics. The 2011 competition was titled “Is Reality Digital and Analogue” and drew a few hundred essays from around the world. The third prize is 2000 USD.

# THE UNIVERSITY OF BRITISH COLUMBIA

## *Publications Record*

**SURNAME:** Rozali

**FIRST NAME:** Moshe

**Initials:**

**Date:** 3 April 2025

**Note:** The authorship convention in high-energy theoretical physics does not include any hierarchy between different authors. The concepts of first or last author do not exist. The names in the publications below are listed alphabetically, in accordance with the convention in my field of study. I have highlighted (in boldface) the HQP who were training at UBC at the time.

### 1. REFEREED PUBLICATIONS

1. Moshe Rozali, “Non-Perturbative Decoupling of Heavy Fermions”, Published in Physics Letters B345, 507 (1995).
2. Willy Fischler, Sonia Paban, Moshe Rozali, “Collective Coordinates in String Theory”, Published in Physics Letters B352, 298 (1995).
3. Willy Fischler, Sonia Paban, Moshe Rozali, “Collective Coordinates for D-Branes”, Published in Physics Letters B381, 62 (1996).
4. Richard Corrado, David Berenstein, Willy Fischler, Sonia Paban, Moshe Rozali, “Virtual D-Branes”, Published in Physics Letters B384, 93 (1996).
5. Moshe Rozali, “Matrix Theory and U-Duality in Seven Dimensions”, Published in Physics Letters B400, 260 (1997).
6. Micha Berkooz, Moshe Rozali, Nathan Seiberg, “Matrix Description of M Theory on  $T^4$  and  $T^5$ ”, Published in Physics Letters B408, 105 (1997).
7. Micha Berkooz, Moshe Rozali, “String Dualities from Matrix Theory”, Published in Nuclear Physics B516, 229 (1998).
8. Robert Leigh, Moshe Rozali, “A Note on Six Dimensional Gauge Theories”, Published in Physics Letters B433, 43 (1998).
9. Robert Leigh, Moshe Rozali, “The Large N Limit of the (2,0) Superconformal Field Theory”, Published in Physics Letters B431, 311 (1998).
10. Robert Leigh, Moshe Rozali, “Brane Boxes, Anomalies, Bending and Tadpoles”, Published in Physical Review D59, 026004 (1999).
11. Arvind Rajaraman, Moshe Rozali, “On the Quantization of the GS String on  $AdS_5 \times S^5$ ”, Published in Physics Letters B468, 58 (1999).
12. Ilka Brunner, Arvind Rajaraman, Moshe Rozali, “D-Branes on Asymmetric Orbifolds”, Published in Nuclear Physics B558, 205 (1999).
13. Arvind Rajaraman, Moshe Rozali, “D-Branes in Linear Dilaton Backgrounds”, Published in Journal of High Energy Physics 9912, 005 (1999).
14. Moshe Rozali, “Hypermultiplet Moduli Space and Three Dimensional Gauge Theories”, Published in Journal of High Energy Physics, 9912, 013 (1999).

15. Arvind Rajaraman, Moshe Rozali, “Noncommutative Gauge Theory, Divergences and Closed Strings”, Published in Journal of High Energy Physics 0004, 033 (2000).
16. Micha Berkooz, Moshe Rozali, “Near Hagedorn Dynamics of NS Fivebranes, or A New Universality Class of Coiled Strings”, Published in Journal of High Energy Physics 0005, 040 (2000).
17. Mark van Raamsdonk, Moshe Rozali, “Gauge Invariant Correlators in Noncommutative Gauge Theory”, Published in Nuclear Physics B608, 103 (2001).
18. Moshe Rozali, “High Energy Scattering in Noncommutative Gauge Theory”, Published in Journal of Korean Physical Society 39, s584 (2001).
19. Arvind Rajaraman, Moshe Rozali, “Boundary States for D-branes on AdS<sub>3</sub>”, Published in Physics Review D66, 026006 (2002).
20. Robert Leigh, Kazumi Okuyama, Moshe Rozali, “PP-Waves and Holography”, Published in Physical Review D66, 046004 (2002).
21. **Philip DeBoer**, Moshe Rozali, “Thermal Correlators in Little String Theory”, Published in Physical Review D67, 086009 (2003).
22. Joel Geidt, Erich Poppitz, Moshe Rozali, “Deconstruction, Lattice Supersymmetry, Anomalies and Branes”, Published in Journal of High Energy Physics 0303, 035 (2003).
23. **Dominic Brecher**, **Philip DeBoer**, David Page, Moshe Rozali, “Closed Timelike Curves and Holography in Compact Plane Waves”, Published in Journal of High Energy Physics 0310, 031 (2003).
24. Micha Berkooz, Boris Pioline, Moshe Rozali, “Closed Strings in Misner Space”, Published in Journal of Cosmology and Astrophysics 0408, 004 (2004).
25. **Dominic Brecher**, **Jianyang He**, Moshe Rozali, “On Charged Black Holes in Anti-de-Sitter Space”, Published in Journal of High Energy Physics 0504, 004 (2005).
26. **Callum Quigley**, Moshe Rozali, “One-Loop MHV Amplitudes in Supersymmetric Gauge Theories”, Published in Journal of High Energy Physics 0501, 053 (2005).
27. **Callum Quigley**, Moshe Rozali, “Recursion Relations, Helicity Amplitudes and Dimensional Regularization”, Published in Journal of High Energy Physics 0603, 004 (2006).
28. **Kazumi Okuyama**, Moshe Rozali, “Hairpin Branes and D-Branes Behind the Horizon”, Published in Journal of High Energy Physics 0603, 071 (2006).
29. Vijay Balasubramanian, Don Marolf, Moshe Rozali, “Information Recovery from Black Holes”, First prize in the Gravity Research Foundation essay competition, Published in General Relativity and Gravitation 38, 1529 (2006), Reprinted in International Journal of Modern Physics D15, 228 (2006).
30. Moshe Rozali, “D-Branes Behind The Horizon”, Published in the Canadian Journal of Physics 85, 619 (2007).
31. **Jianyang He**, Moshe Rozali, “On Bubbles of Nothing in AdS/CFT”, Published in Journal of High Energy Physics 0709, 089 (2007).
32. Moshe Rozali, **Brian Shieh**, Mark Van Raamsdonk and **Jackson Wu**, “Cold Nuclear Matter in Holographic QCD”, Published in Journal of High Energy Physics 0801, 053 (2008).

33. **Lionel Brits**, Moshe Rozali, “Holography and Fermions at Finite Chemical Potential”, Published in Canadian Journal of Physics, 87, 271 (2009).
34. Moshe Rozali, “Comments on Background Independence and gauge Redundancies”, Published in Advanced Science Letters 2, 244 (2009).
35. **Pallab Basu, Jianyang He, Anindya Mukherjee**, Moshe Rozali, **Hsein-Hang Shieh**, “Holographic Phase Competition”, Published in JHEP 1010, 092 (2010).
36. **Pallab Basu, Jianyang He, Anindya Mukherjee**, Moshe Rozali, **Hsein-Hang Shieh**, “Comments on Non-Fermi Liquids in the presence of a Condensate”, Published in the Canadian Journal of Physics 89, 231 (2011).
37. **Pallab Basu, Fernando Nogueira**, Moshe Rozali, **Jared Stang** and Mark van Raamsdonk, “Towards A Holographic Models of Color Superconductivity”, Published in New Journal of Physics 13, 055001 (2011).
38. **Bartek Czech, Klaus Larjo** and Moshe Rozali, “Black Holes as Rubik’s Cubes”, Published in Journal of High Energy Physics 1108, 143 (2011).
39. **Bartek Czech**, YuTin Huang and Moshe Rozali, “Chiral 3 point Interactions in 5 and 6 Dimensions”, Published in Journal of High Energy Physics, 1210, 143 (2012).
40. Moshe Rozali, **Darren Smyth** and **Evgeny Sorkin**, “Holographic Higgs Phases”, Published in Journal of High Energy Physics 1208, 118 (2012).
41. Moshe Rozali, “Compressible Matter at an Holographic Interface”, Published in Physical Review Letters 109 (2012), 231601.
42. Moshe Rozali, **Darren Smyth, Evgeny Sorkin** and **Jared B. Stang**, “Holographic Stripes”, Published in Physical Review Letters 110 (2013), 201603.
43. **Darren Smyth, Evgeny Sorkin, Jared B. Stang** and Moshe Rozali, “Striped Order in AdS/CFT”, Published in Physical Review D. 87, 126007 (2013).
44. Moshe Rozali, **Jared B. Stang** and Mark van Raamsdonk, “Holographic Baryons from Oblate Instantons”, Published in Journal of High Energy Physics 1402, 044 (2014).
45. Moshe Rozali and **Alexandre Vincart-Emard**, “Chiral Edge Currents in a Holographic Josephson Junction”, Published in Journal of High Energy Physics 1401, 003 (2014).
46. Tomas Andrade, Sebastian Fischetti, Don Marolf, Simon F. Ross and Moshe Rozali, “Entanglement and Correlations Near Extremality: CFTs Dual to Reissner-Nordstrom AdS5”, Published in Journal of High Energy Physics 1404, 023 (2014).
47. Moshe Rozali, **Darren Smyth**, “Fermi Liquids from D-Branes”, Published in Journal of High Energy Physics 1405, 129 (2014).
48. Mukund Rangamani, Moshe Rozali, **Anson Wong**, “Driven Holographic CFTs”, Published in Journal of High Energy Physics, 1504, 093 (2015).
49. Mukund Rangamani, Moshe Rozali, Mark van Raamsdonk, “Cosmological Particle Production at Strong Coupling”, Published in Journal of High Energy Physics 1509, 213 (2015).
50. Mukund Rangamani, Moshe Rozali, **Darren Smyth**, “Spatial Modulation and Conductivities in Effective Holographic Theories”, Published in Journal of High Energy Physics 1507, 024 (2015).



51. Mukund Rangamani, Moshe Rozali, **Alexandre Vincart-Emard**, “Dynamics of Holographic Entanglement Entropy following a Local Quench”, Published in Journal of High Energy Physics 1604, 069 (2016).
52. Moshe Rozali and **Alexandre Vincart-Emard**, “On Brane Instabilities in the large D Limit”, Published in Journal of High Energy Physics 1608, 166 (2016).
53. Micha Berkooz, Prithvi Narayan, Moshe Rozali and Joan Simon, “Higher Dimensional Generalizations of the SYK Model”, Published in Journal of High Energy Physics 1701, 138 (2017).
54. Micha Berkooz, Prithvi Narayan, Moshe Rozali and Joan Simon, “Comments on the Random Thirring Model”, Published in Journal of High Energy Physics 1709, 059 (2017).
55. Moshe Rozali and **Alexandre Vincart-Emard**, “Comments on Entanglement Propagation”, Published in Journal of High Energy Physics 1706, 044 (2017).
56. Rob Myers, Moshe Rozali and **Benson Way**, “Holographic Quenches in a Confined Phase”, Published in Journal of Physics A50, no. 49, 494002 (2017). (Issue dedicated to John Cardy)
57. Moshe Rozali, Evyatar Sabag and Amos Yarom, “Holographic Turbulence in a Large Number of Dimensions”, Published in Journal of High Energy Physics 1804 (2018) 065.
58. Moshe Rozali, **Felix Haehl**, “Fine Grained Chaos in AdS2 Gravity”, Published in Physical Review Letters 120 (2018) no.12, 121601.
59. Moshe Rozali and **Benson Way**, “Gravitating Scalars and Critical Collapse in the Large D Limit”, Published in Journal of High Energy Physics 1811, 106 (2018).
60. Marcel Franz, Moshe Rozali, “Mimicking Black Hole Event Horizons in Atomic and Solid-State System”, Published in Nature Review Materials 4, 491 (2018).
61. **Felix Haehl**, Moshe Rozali, “Effective Field Theory of Chaotic CFTs”, Published in Journal of High Energy Physics 1810, 118 (2018).
62. **Sean Cooper**, Moshe Rozali, Brian Swingle, Mark van Raamsdonk, **Chris Waddell**, **David Wakeham**, “Black Hole Microstate Cosmology”, Published in JHEP 07 (2019) 065.
63. **Felix Haehl**, **Wyatt Reeves** and Moshe Rozali, “Reparametrization modes, shadow operators, and quantum chaos in higher-dimensional CFTs”, Published in JHEP 11 (2019) 102.
64. Moshe Rozali, **Jamie Sully**, Mark van Raamsdonk, **Chris Waddell**, **David Wakeham**, “Information radiation in BCFT models of black holes”, Published in JHEP 05 (2020) 004.
65. **Sean Cooper**, **Dominik Neuenfeld**, Moshe Rozali, **David Wakeham**, “Brane dynamics from the first law of entanglement”, Published in JHEP 03 (2020) 023.
66. **Jason Pollack**, Moshe Rozali, **Jamie Sully** and **David Wakeham**, “Eigenstate Thermalization and Disorder Averaging in Gravity”, Published in PRL 125 (2020) 2, 021601.
67. **Arjun Kar**, **Lampros Lamprou**, Moshe Rozali and **James Sully**, “Random matrix theory for complexity growth and black hole interiors”, Published in JHEP 01 (2022) 016.
68. **Wyatt Reeves**, Moshe Rozali, **Petar Simidzija**, **James Sully**, **Christopher Waddell**, “Looking for (and not finding) a bulk brane”, Published in JHEP 12 (2021) 002.
69. **Felix Haehl**, **Charles Marteau**, **Wyatt Reeves**, Moshe Rozali, “Symmetries and spectral statistics in chaotic conformal field theories”, JHEP 07 (2023) 196.

70. **Felix Haehl, Wyatt Reeves**, Moshe Rozali, “Symmetries and spectral statistics in chaotic conformal field theories II: Maass cusp forms and arithmetic chaos”, JHEP 12 (2023) 161.
71. **Felix Haehl, Wyatt Reeves**, Moshe Rozali, “Euclidean wormholes in two-dimensional conformal field theories from quantum chaos and number theory”, Phys.Rev.D 108 (2023) 10.
72. **Chuanxin Cui**, Moshe Rozali, “Comments on firewalls in JT gravity with matter”, JHEP 03 (2025) 104.
73. Jan Boruch, Gabriele Di Ubaldo, Felix M. Haehl, Eric Perlmutter, Moshe Rozali, “Modular-invariant random matrix theory and AdS3 wormholes”, Published in Phys.Rev.Lett. 135 (2025) 12, 121602.
74. Alexander Altland, **Jeremy van der Heijden**, Tobias Micklitz, Moshe Rozali, Joaquim Telles de Miranda, “Universality Class of the First Levels in Low-Dimensional Gravity”, Published in Phys.Rev.Lett. 135 (2025) 12, 121601.
75. **Chuanxin Cui**, Moshe Rozali, “Splitting and gluing in sine-dilaton gravity: matter correlators and the wormhole Hilbert space”, Submitted to JHEP.
76. Gabriele Di Ubaldo, Altay Etkin, Felix M. Haehl, Moshe Rozali, “Mind the crosscap: N-scaling in non-orientable gravity and time-reversal-invariant system”, Submitted to JHEP.

## **2. WORK SUBMITTED OR IN PREPARATION**

### **3. NON-REFEREED PUBLICATIONS**

Moshe Rozali, “Why 10 or 11 Dimensions?” in “Ask the Experts”, Scientific American, February 2006.

Moshe Rozali, “Continuous Spacetimes from Discrete Holographic Models”, winner of 3rd prize in the FQXI essay competition “Is Reality Digital or Analog?” January 2011.