

# DR. MIRAH GARY

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## Personal

- **Born** November 23, 1983
- **Citizenship** US Citizen *Austrian Resident*

## Education

- **University of California, Santa Barbara** *PhD* — Physics *June 2011*
- **University of California, Santa Barbara** *MA* — Physics *December 2009*
- **University of California, Berkeley** *BA with Honors* — Physics, Applied Mathematics *May 2005*

## Positions

- **Senior Postdoctoral Scholar/PI** Institute for Theoretical Physics, Technische Universität Wien *November 2014 to Present*
- **Postdoctoral Scholar** Institute for Theoretical Physics, Technische Universität Wien *September 2011 to October 2014*
- **Marie Curie Fellow** Theory Division, CERN *January 2009 to June 2009*
- **Summer Student** Laboratoria Nazionali di Frascati, Istituto Nazionali di Fisica Nucleare *June 2005 to August 2005*

## Grants & Awards

- **CONICET Prize Postdoc** (declined) *December 2014*
- **FWF Stand-Alone Project** “Higher Spin Holography in Curved Spacetimes” (EUR 330k) *November 2014 to October 2017*
- **Berkeley Physics Undergraduate Research Scholar** *Fall 2003, Fall 2004, Spring 2005*
- **Isidore Pomerantz Scholarship in Physics** *Fall 2004*
- $\Sigma\Pi\Sigma$  National Physics Honor Society *May 2004*

## Talks

- **STAG Workshop on holography, black holes and numerical relativity, Southampton, UK** “The BMS Bootstrap.” (April 2017)
- **String Theory Universe, Leuven, Belgium** “Phases of Higher Spin Flat Space.” (September 2015)
- **Karl Schwarzschild Meeting, Frankfurt, Germany** “Phases of Flat Space Higher Spin Gravity.” (July 2015)
- **Holographic Methods and Applications, Reykjavik, Iceland** “Higher Spin Lifshitz Holography with Isotropic Scale Invariance.” (August 2014)
- **Academy of Sciences of the Czech Republic** “Higher Spin Lifshitz Holography.” (March 2014)
- **Université Libre de Bruxelles** “Higher Spin Lifshitz Holography.” (March 2014)
- **COST-WIS Workshop on Black Holes and Quantum Information** “The Geometry of Higher Spins Reconsidered.” (January 2014)

- **Kavli IPMU MS Seminar** “Higher Spin 3d Gravity: Beyond AdS.” (July 2013)
- **Strings 2013** “ $W_N^{(2)}$  Gravity.” (June 2013)
- **EFI Winter Conference** “Higher Spin Gravity in 3D and Unitarity.” *Invited Talk* (February 2013)
- **9<sup>th</sup> Vienna Central European Seminar** “Holography and the Gravitational S-Matrix.” (November 2012)
- **ESI Workshop on Higher Spin Gravity** “Beyond AdS Holography in Higher Spin Gravity.” (April 2012)
- **50. Internationale Universitätswochen für Theoretische Physik (Schladming Winter School)** “Non-AdS Holography and Higher Spin Gravity.” (February 2012)
- **Vienna Theory Lunch Seminar** “Local Bulk Physics in the AdS/CFT Correspondence.” (November 2011)
- **CERN String Theory Seminar** “Constraints on a Fine-Grained AdS/CFT Correspondence.” (July 2011)
- **UCSB High Energy and Gravity Seminar** “Dual Giant Gravitons and Emergent Curvature.” (January 2011)
- **Theoretical Advanced Studies Institute in Elementary Particle Physics (TASI)** “Creating Small AdS Black Holes.” (June 2010)
- **GGI New Perspectives on String Theory Summer School** “AdS/CFT, the Flat-Space S-Matrix, and Singularities.” (June 2009)
- **Santa Barbara Gravity Workshop** “2D Models for Relational Observables.” (May 2007)
- **Pacific Coast Gravity Meeting** “Relational Observables in 2d Quantum Gravity.” (March 2007)

## Schools & Workshops

- **STAG Workshop on holography, black holes and numerical relativity** Southampton, UK *April 2017*
- **Flat Holography** Simons Center for Geometry and Physics, SUNY Stonybrook *April 2016*
- **54. Internationale Universitätswochen für Theoretische Physik (Schladming Winter School)** Schladming, Austria *February 2016*
- **52. Internationale Universitätswochen für Theoretische Physik (Schladming Winter School)** Schladming, Austria *February 2014*
- **COST-WIS Workshop on Black Holes and Quantum Information** Weizmann Institute, Israel *January 2014*
- **String Theory, Black Holes and Holography** Yukawa Institute for Theoretical Physics, Kyoto *July 2013*
- **Higher Spins, Strings, and Duality** Galileo Galilei Institute, Firenze *April 2013 to May 2013*
- **2nd Solvay Workshop on Higher Spin Gauge Theories** Solvay Institute, Brussels *February 2013*
- **3rd O’Raifeartaigh Conference on Symmetry and Integrability** Arnold Sommerfeld Center for Theoretical Physics, Munich *July 2012*
- **ESI Workshop on Higher Spin Gravity** Erwin Schrödinger Institute, Vienna *April 2012*
- **50. Internationale Universitätswochen für Theoretische Physik (Schladming Winter School)** Schladming, Austria *February 2012*
- **Theoretical Advanced Studies Institute in Elementary Particle Physics (TASI)** University of Colorado, Boulder *June 2010*
- **New Perspectives on String Theory Summer School** Galileo Galilei Institute, Firenze *June 2009*
- **Winter School on Supergravity, Strings and Gauge Theories** CERN *February 2009*
- **Santa Barbara Gravity Workshop** Santa Barbara, CA *May 2007*

## Teaching

- **Co-Supervisor** Institute for Theoretical Physics, Vienna University of Technology
  - Co-Supervision of PhD Student

- Co-Supervision of 3 Masters Students
- **Graduate Student Instructor** University of California, Santa Barbara
  - Relativistic Quantum Field Theory *Spring 2008, Winter 2011*
  - Mathematical Methods for Physicists *Fall 2005, Fall 2006, Winter 2007*
  - Physics for Engineers *Winter 2006*
  - Physics of California (Continuum Dynamics) *Spring 2006*
  - Physics for the Life Sciences (Lab) *Summer 2006*
- **Undergraduate Student Instructor** University of California, Berkeley
  - Basic Semiconductor Circuits (Lab) *Spring 2005*
  - Modern Physics *Spring 2003*
- **Private Tutor**
  - Classical Mechanics, Quantum Mechanics *Winter to Spring 2008*

## Programs Organized

- **Scientific Python Workshop** Organizer *May 2016*
- **Scientific Speaking Workshop, Frauen\_Ideen\_Fabrik2** Facilitator *April 2015*
- **UCSB Physics Graduate Student Colloquium** Organizer *Fall 2007 to Fall 2009*

## References

- **Daniel Grumiller** TUWien [grumil@hep.itp.tuwien.ac.at](mailto:grumil@hep.itp.tuwien.ac.at)
- **Steve Giddings** UCSB [giddings@physics.ucsb.edu](mailto:giddings@physics.ucsb.edu)
- **Radoslav Rashkov** TUWien, U. Sophia [rash@hep.itp.tuwien.ac.at](mailto:rash@hep.itp.tuwien.ac.at)
- **Omer Blaes** UCSB (teaching) [blaes@physics.ucsb.edu](mailto:blaes@physics.ucsb.edu)