

Title: Keynote

Speakers: Natacha Altamirano

Collection: PSI 15th Anniversary Reunion

Date: June 18, 2024 - 10:00 AM

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# My Career Trajectory

Natacha Altamirano

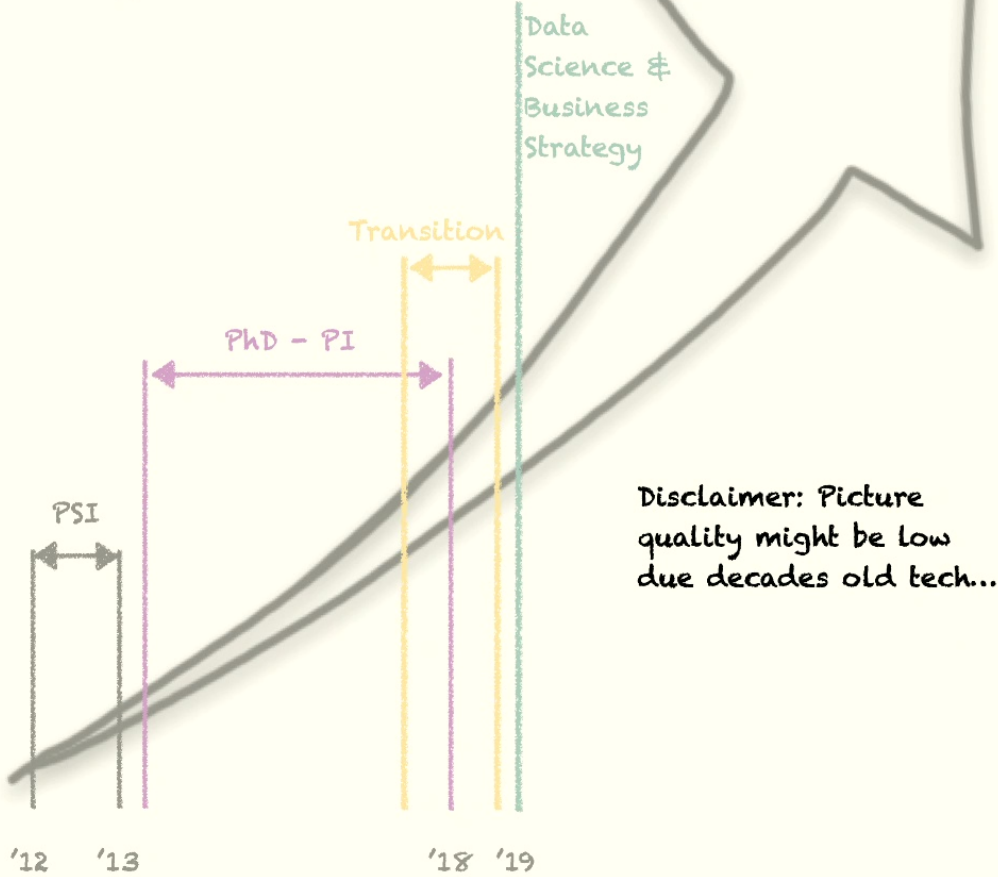
PSI 15th Anniversary Reunion

June 18th 2024

Perimeter Institute for Theoretical Physics

Waterloo, Canada

# Agenda



Disclaimer: Picture quality might be low due decades old tech...





# PSI 2012-2013 Facts

- Lived at 102 Seagram Dr.
- First generation with Interviews
- First-generation with no "all you can drink" at the Bistro
- Colour of T-shirt = greyed blue





# PSI 2012-2013 Facts

- We (allegedly...) worked hard together



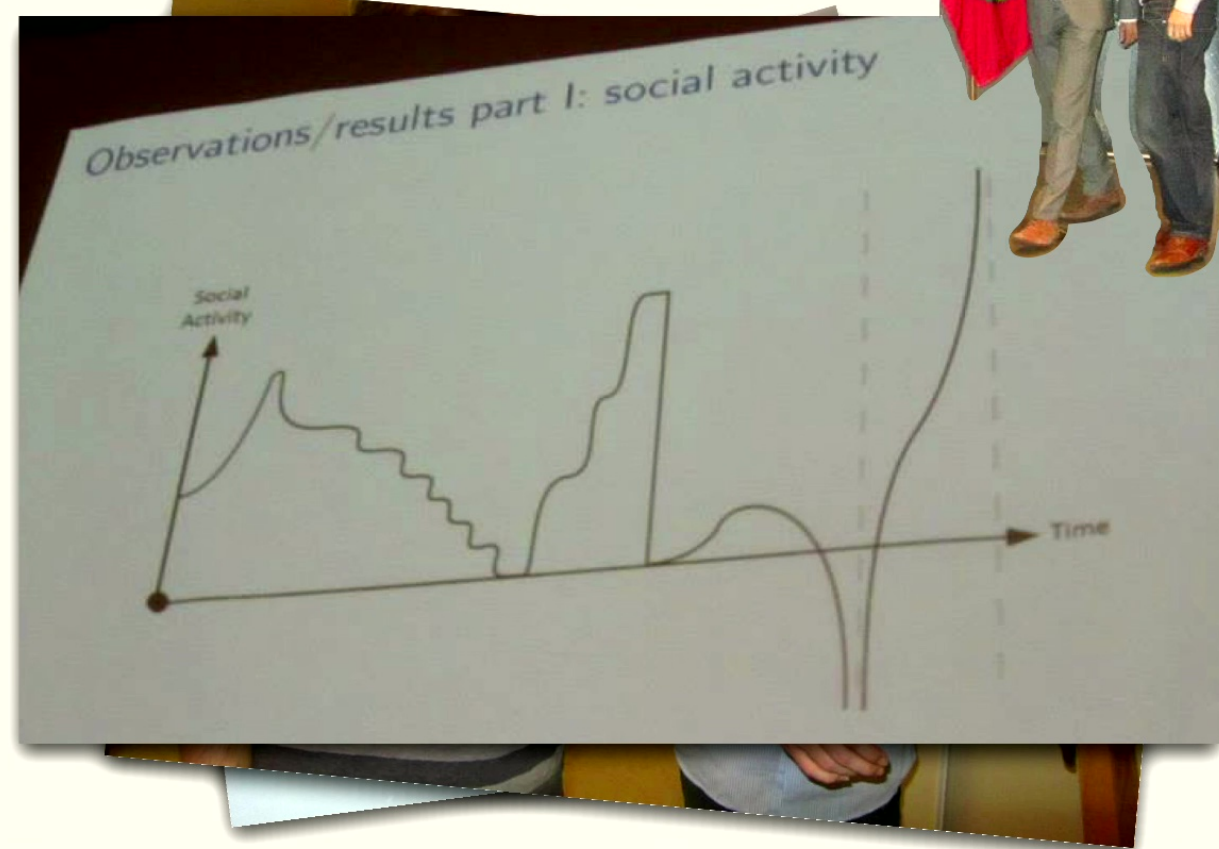
# PSI 2012-2013 Facts

- We (allegedly...) worked hard together
- We got Injured together



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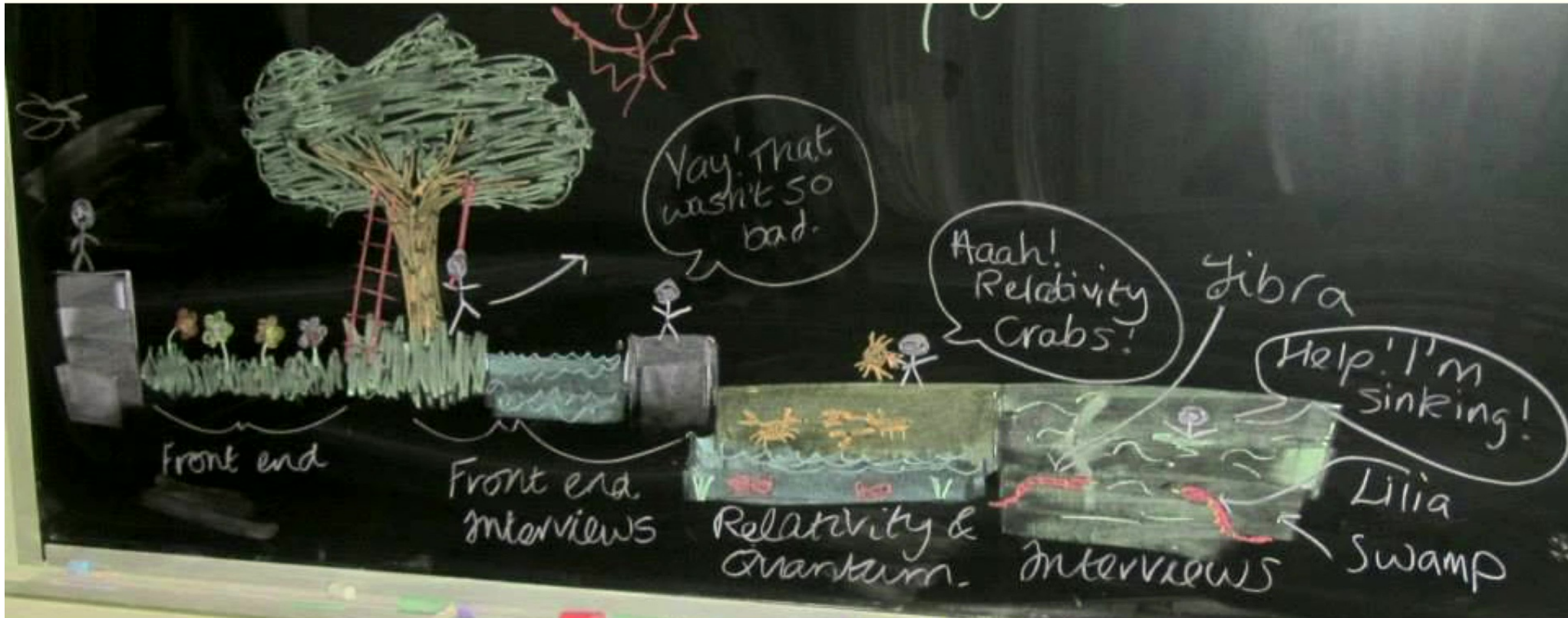
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# My PSI Experience



# My PSI Experience



- Undergrad in Argentina
- Looking to learn more about cutting-edge physics
- PI was a fantastic fit

# My PSI Experience

- I had a fantastic Research Experience
- Published 3 papers out of my research
- ~1,000 citations

## Reentrant Phase Transitions in Rotating AdS Black Holes

Natacha Altamirano,<sup>1,2,\*</sup> David Kubizňák,<sup>1,†</sup> and Robert B. Mann<sup>1,2,‡</sup>

<sup>1</sup>Perimeter Institute, 31 Caroline St. N. Waterloo Ontario, N2L 2Y5, Canada

<sup>2</sup>Department of Physics and Astronomy, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1

(Dated: June 24, 2013)

## Kerr-AdS analogue of triple point and solid/liquid/gas phase transition

Natacha Altamirano,<sup>1,2,\*</sup> David Kubizňák,<sup>1,†</sup> Robert B. Mann,<sup>3,‡</sup> and Zeinab Sherkatghanad<sup>1,3,4,§</sup>

<sup>1</sup>Perimeter Institute, 31 Caroline St. N., Waterloo, Ontario, N2L 2Y5, Canada

<sup>2</sup>Facultad de Matemática, Astronomía y Física, FaMAF,

Universidad Nacional de Córdoba, Instituto de Física Enrique Gaviola,

IFEG, CONICET, Ciudad Universitaria (5000) Córdoba, Argentina

<sup>3</sup>Department of Physics and Astronomy, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1

<sup>4</sup>Department of Physics, Isfahan University of Technology, Isfahan, 84156-83111, Iran

(Dated: January 25, 2014)

## Thermodynamics of rotating black holes and black rings: phase transitions and thermodynamic volume

Natacha Altamirano,<sup>1,2,\*</sup> David Kubizňák,<sup>1,3,†</sup> Robert B. Mann,<sup>3,‡</sup> and Zeinab Sherkatghanad<sup>1,3,4,§</sup>

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<sup>4</sup>Department of Physics, Isfahan University of Technology, Isfahan, 84156-83111, Iran

(Dated: January 11, 2014)

In this review we summarize, expand, and set in context recent developments on the thermodynamics of black holes in extended phase space where the cosmological constant is interpreted







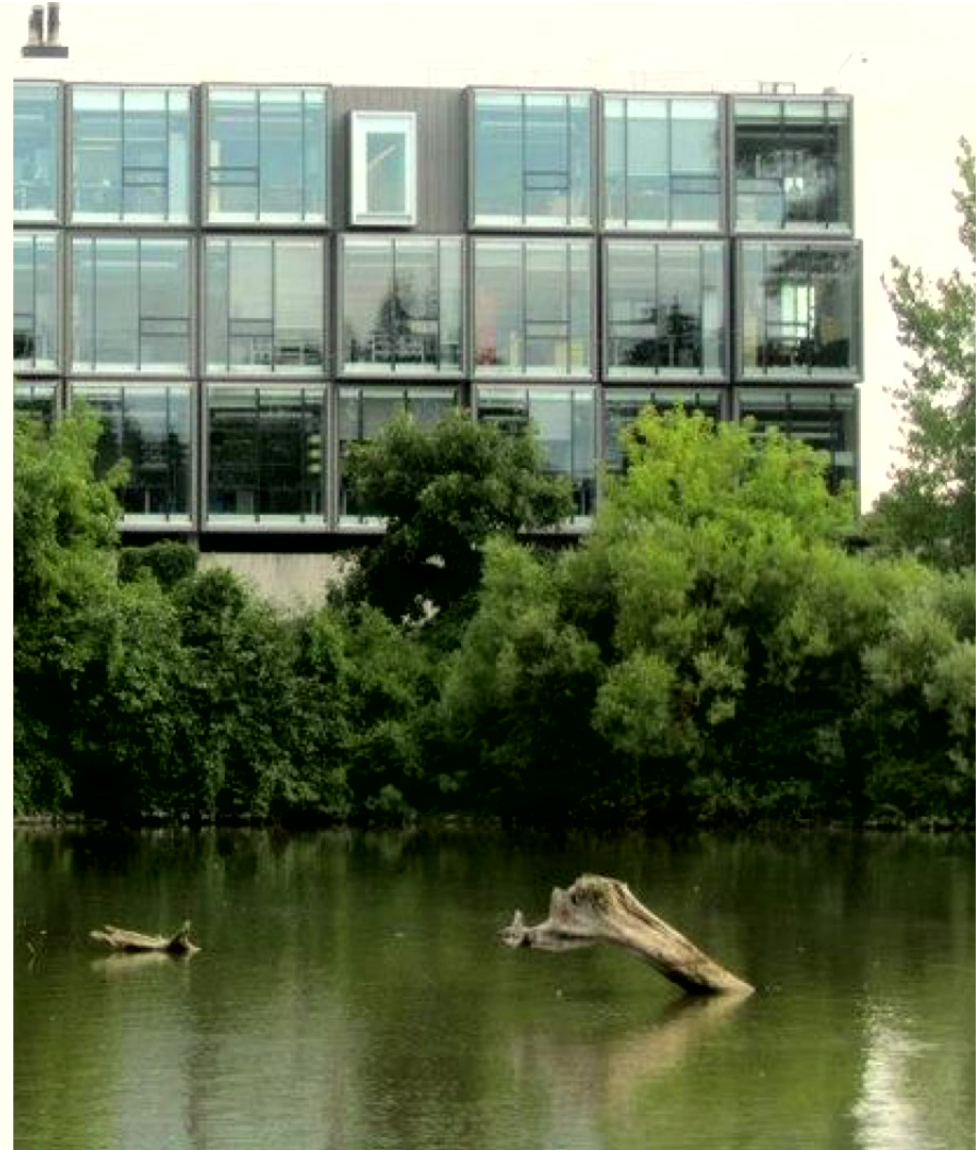
# My PhD Experience

- I returned to PI to pursue my PhD in 2014
- Research under the supervision of Niayesh Afshordi and Robb Mann
- Research was in gravitational physics and observational cosmology



# My PhD Experience (Transition to Industry)

- Made the decision to find a job in the industry by the end of the 3rd year
- Connected with many physicists working in industry to understand all opportunities
- Leverage resources from PI and UW
- Understood what I didn't want to do





# Data Science & Business Strategy in Private Equity

- We buy, grow and sell business
- Leading Canadian Mid-Market firm with \$5 billion under management
- Since 1995 BHEP made 71 investments and fully realized 57
- 14 parent companies that represent Canada's largest corporation with \$9 billion of revenue and over 30,000 employees







# The Data Science Team

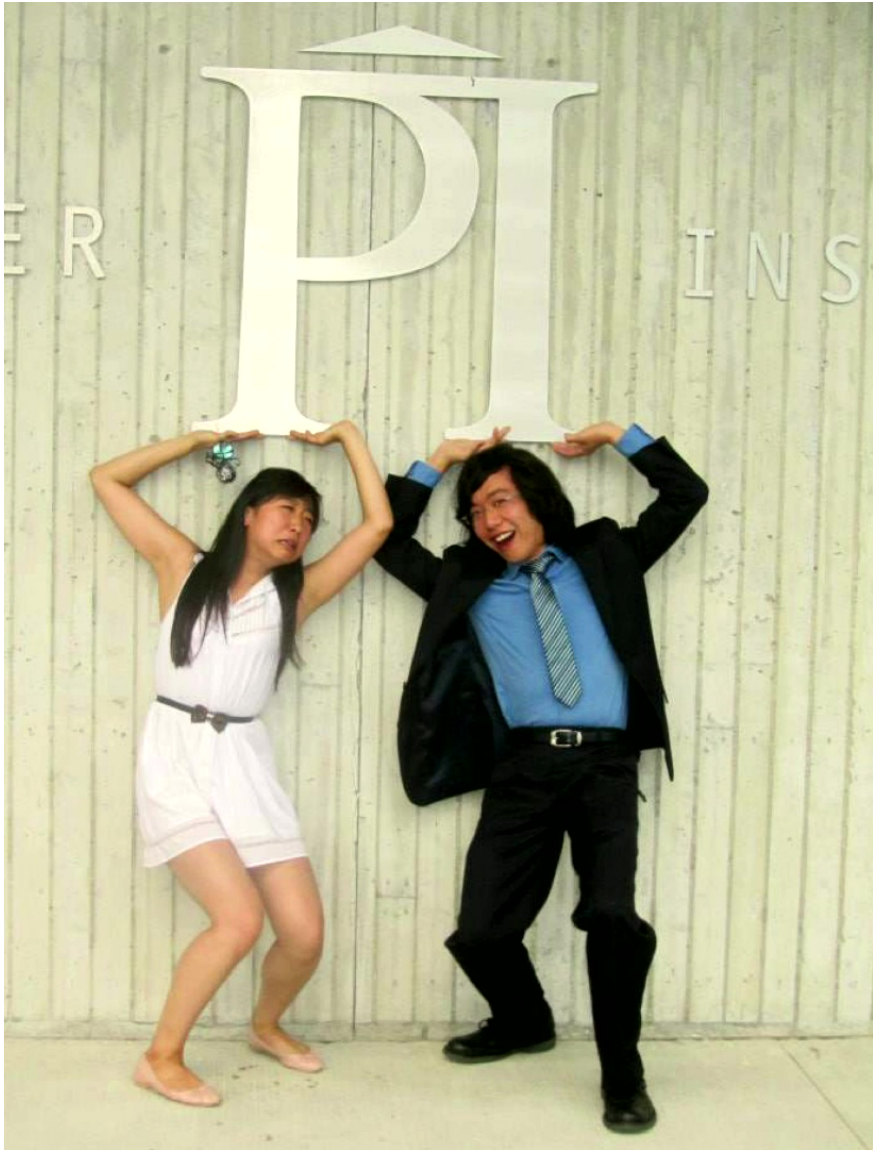
- 25 people with distinct backgrounds: business, engineering, physics, math, etc.
- Our work is divided into three verticals
  - Analytics Capabilities and Measure Success
  - Strategy definition
  - Process reengineering and value creation

# My "day-to-day"

- Solve challenging problems
- Manage projects and people
- Lots on whiteboards and brainstorming
- Time with people from companies
- Set the direction of the team and new areas of expertise







# Physics → Industry

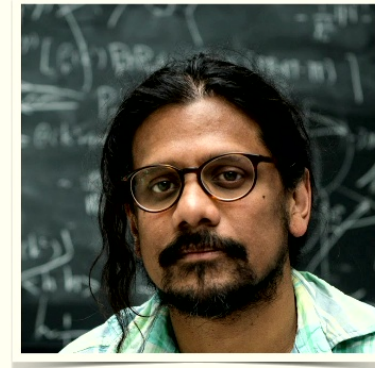
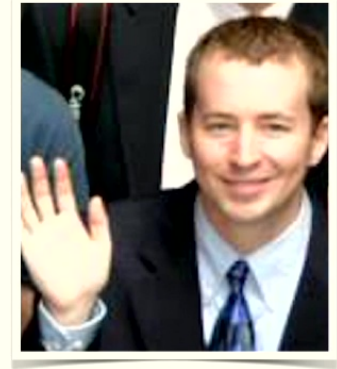
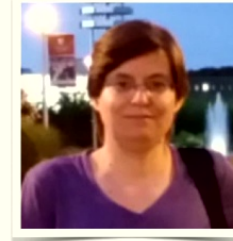
[Unsolicited advice ;) ]

- ~~Academia vs. Industry~~
- Define what success means to you (and what you don't want to do)
- Do your research, meet people and develop the new skills
- Challenge your hypothesis continuously



Thanks!

# Thanks!





Thanks!

(Questions?)