

The Sixth Biennial Early-Career Conference for Historians of the Physical Sciences

Conference Program

Location: Hotel Victoria Sol Marina, Ilha de Itaparica Hall

Dates: August 4 to 9, 2025

Sunday, August 3

Welcome gathering

Monday, August 4

8:30–9:00 am

Welcome

9:00–10:30 am

Introductions

Chair: Climério Paulo da Silva Neto

Each participant has 2 minutes to introduce themselves and present their research topic.

10:30–11:00 am - Break

Coffee and snacks provided in the foyer.

11:00 am–12:30 pm

Session 1: Physics in Brazil

Commentator: Ivã Gurgel

Chair: Carla Rodrigues Almeida

- **Ricardo Ribeiro** – First Phase of the Brazilian Nuclear Program (1946–1955)
- **Victor Luiz China Gonçalves** – The Uses of Computers in Solid-State Physics Research at the University of São Paulo (ca. 1960–1969)
- **Mylena Gaspar Amoedo** – The History of Decoherence from the Perspectives of the Theoretical Contributions of Brazilian Physicists Amir Caldeira and Luiz Davidovich

12:30–2:00 pm

Lunch

2:00–3:30 pm

Session 2: Bringing Coherence to the Global

Commentator: William Thomas

Chair: Duim Huh

- **Sara Bassanelli** – The Diplomacy of Standardization: Negotiating International Electrical Units from the 1930s to the 1960s
- **Michiel Bron** – How to deal with a nuclear petro-state? Geopolitical consequences of an intertwined history of nuclear and oil
- **Janna K. Mueller** – Early 19th Century Sunspot Observations and the Nature of the Sun

3:30–4:00 pm - Break

Coffee and snacks provided in the foyer.

4:00–5:30 pm

Keynote Lecture

Chair: Jean-Philippe Martinez

Gisela Mateos – Physics on the Move: Technical Assistance for Development in Latin America

7:00 pm

Welcome Reception

Tuesday, August 5

9:00–10:30 am

Round Table 1: Celebrating the global and the local of science/scientific practices

Chair: Carla Rodrigues Almeida

With Roberto Lalli, Ivã Gurgel, and Richard Staley

10:30–11:00 am - Break

Coffee and snacks provided in the foyer.

11:00 am–12:30 pm

Session 3: Re-reading the history of astrophysics from marginalized labor

Commentator: Rebecca Charbonneau

Chair: Climério Paulo da Silva Neto

- **Rebecka Mikaela Mähring** – Disciplining Photographs: Labor Organization and Photography at the Royal Greenwich Observatory
- **Eun-Joo Ahn** – Invisible workers and invisible Place: making of a modern astronomical observatory in Southern California in the early twentieth century
- **Poliana Martins** – Gendered Labor and Glass Plates: The Harvard Women Behind the H-R Diagram

12:30–2:00 pm

Lunch

2:00–3:30 pm

Session 4: Materiality of Physics

Commentator: Gisela Mateos

Chair: William Thomas

- **Thiago Faustino** – Before Charles Goodyear’s vulcanization: South American indigenous material knowledge and the rise of early rubber research in France, 1743-1791
- **Anxo Vidal Nogueira** – Diversity in Uniform: A Tale of Two Astronomical Instruments in Santiago de Compostela across the Francoist regime.
- **Lingzhao Meng** – The Establishment of the Luoxueshan Laboratory and the Early Development of Cosmic-ray Research in China

3:30–4:00 pm - Break

Coffee and snacks provided in the foyer.

4:00–5:30 pm

Session 5: Physics and Physicists in Climate Science

Commentator: Richard Staley

Chair: Jinyan Liu

- **Madison Renner** – Big Island, small world: Maintaining atmospheric access on Hawai’i throughout the history of the Keeling curve
- **Robert Naylor** – Rolando García: Refugee, Radical, Climate's Attorney at Law
- **Barbara Mercier** – A Numerical Experiment: From Weather Forecasting to Climate Modelling

Wednesday, August 6

Schooner trip to Ilha dos Frades, leaving the hotel pier at 8 am.

Thursday, August 7

9:00–10:30 am

Session 6: Re-reading the history of the physical sciences from women’s history

Commentator: Joanna Behrman

Chair: Elena Schaa

- **Megan Briers** – Gender and the Construction of nineteenth-century British eclipse expeditions
- **Charnell Chasten Long** – Recovering Carolyn Parker's Contributions to Physics (1917–1966)
- **Mar Rivera Colomer** – Revisiting the Foundations: Voices from the Margins

10:30–11:00 am - Break

Coffee and snacks provided in the foyer.

11:00 am–12:30 pm

Session 7: Interpretations and Debates in Physics Around the World

Commentator: Olival Freire Junior

Chair: William Thomas

- **S. Prashant Kumar** – The Symmetry Eaters: Group Theory and Intellectual Property in Relativistic Quantum Mechanics
- **Emily Philippi** – Philosophical Discussion and Interpretation of Quantum Physics in the GDR
- **Beñat Monfort Urkizu** – A Posteriori Theory Adjustments in the Early Universe Cosmology. On the viability of Cosmic Inflation

12:30–2:00 pm

Lunch

2:00–3:30 pm

Session 8: Feminist approaches to the history of physics

Commentator: Daniela Monaldi

Chair: Carla Rodrigues Almeida

- **Colleen Seidel** – “Frauen beobachten oft besser, Männer machen Theorien daraus.” (“Women often observe better, men theorise”) – Representations of female scientists in school and university textbooks for physics in (West) Germany, ca. 1960–2020
- **Lórien MacEnulty** – Are illustrations in physics androcentric? A historical and feminist analysis of visual representation of superexchange in materials

3:30–4:00 pm - Break

Coffee and snacks provided in the foyer.

4:00–6:00 pm

Talks by IUPAP early career prize winners and presentation of the award, plus discussion.

Chair: Rebecca Charbonneau

Joanna Behrman – From Passion to Profession – Studying Women in the History of Physics

Barbara Hof – Fusion Incomplete? International Collaboration in Plasma Physics and Fusion Research, 1950s-1980s.

Friday, August 8

9:00–10:30 am

Conversation on careers in the history of physical sciences

Chair: Elena Schaa

10:30–11:00 am - Break

Coffee and snacks provided in the lobby.

11:00 am–12:30 pm

Session 9: The Quantum Revolution: Roots

Commentator: Alexei Kojevnikov

Chair: Jinyan Liu

- **Siyuan Zhang** – The Evolvement and Its Dynamics of High-Resolution-Power Spectroscopes in Studying the Fine-Structure of Hydrogen Spectrum: 1920s–1930s
- **Sofia Guilhem Basilio** – Letters on Causality: Debates Between Erwin Schrödinger and Hans Reichenbach
- **Bernadette Lessel** – Quantum Pioneers and Classical Field Theorists: Revisiting their Interconnectedness

12:30–2:00 pm

Lunch

2:00–3:30 pm

Session 10: The Quantum Revolution: Consequences

Commentator: Thiago Hartz

Chair: Jean-Philippe Martinez

- **Francisco Calderón** – Inconsistencies in Quantum Field Theories: Replacement vs. Refinement?
- **Gautier Depambour** – From classical to quantum optics: New lights on light
- **Silvia Castillo** – Information, Computation, and the Foundations of Quantum Mechanics: John Wheeler's Influence at the Center for Theoretical Physics (1976–1987)

3:30–4:00 pm - Break

Coffee and snacks provided in the foyer.

4:00–5:30 pm

Keynote Lecture

Chair: Duim Huh

Olival Freire Junior – From the Interpretation of Quantum Mechanics to Quantum Technologies

7:00 pm

Conference Dinner

Saturday, August 9

9:00–10:30 am

Round Table 2: Celebrating Diversity in the history of the physical sciences

Chair: Climério Paulo da Silva Neto

With Indianara Silva, Joanna Behrman, and Katemari Rosa.

10:30–11:00 am - Break

Coffee and snacks provided in the foyer.

11:00 am–12:30 pm

Career Training – Paper Writing Workshop and Farewell

Chair: Climério Paulo da Silva Neto

2:00 pm

Visit to the Barra Fort and Nautical Museum of Bahia.

Guided tour starting at 2:00 pm.

Sunday, August 10

3 pm - Tour: historical center (HQ5)