



WILHELM UND ELSE
HERAEUS-STIFTUNG



ICTP
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International Centre
for Theoretical Physics
South American Institute
for Fundamental Research



INSTITUTO
PRINCIPIA

CHALLENGES OF LOW-DIMENSIONAL QUANTUM GASES: BRAZILIAN-GERMAN WILHELM AND ELSE HERAEUS SEMINAR

March 23 – 27, 2026
at Principia Institute, São Paulo, Brazil

INVITED SPEAKERS

Vanderlei Bagnato (São Carlos, Brazil)
Martin Bonkhoff (Hamburg, Germany)
Monica Caracanhas (São Carlos, Brazil)
Patricia Castilho (São Carlos, Brazil)
Lauriane Chomaz (Heidelberg, Germany)
Vivian França (São Paulo, Brazil)
Georg von Freymann (Kaiserslautern, Germany)
Johannes Hofmann (Göteborg, Sweden)
Joyce Kwan (Harvard, USA)
Marcelo Martinelli (São Paulo, Brazil)
Hanns-Christoph Nägerl (Innsbruck, Austria)
Rodrigo Pereira (Natal, Brazil)
Francesco Piazza (Augsburg, Germany)
Maciej Pieczarka (Wrocław, Poland)
Philipp Preiss (Munich, Germany)
Ernst Rasel (Hannover, Germany)
Sayak Ray (Bonn, Germany)
Carlos Sá de Melo (Atlanta, USA)
Peter Schauss (Hamburg, Germany)
Leticia Tarruell (Barcelona, Spain)
Raul Teixeira (São Carlos, Brazil)
Smitha Vishveshwara (Urbana, USA)
Silvio Vitiello (Campinas, Brazil)
Michiel Wouters (Antwerp, Belgium)
Tarik Yefsah (Paris, France)

This binational Wilhelm and Else Heraeus Seminar organized by ICTP-SAIFR will bring together primarily scientists from Brazil and Germany to discuss both the challenges and the prospects for quantum gases in spatial dimensions lower than three. Scientists from other parts of the world will also participate and provide a global perspective of recent developments. In addition to plenary sessions, where leading experts on quantum gases will present their latest work, the seminar will have contributed talks by some young participants and poster sessions to disseminate widely the research of all attendees.

In recent years it has turned out that low-dimensional quantum gas systems are quite challenging due to the enhanced impact of quantum and thermal fluctuations upon static and dynamic properties. Therefore, the planned Brazilian-German Wilhelm and Else Heraeus Seminar focuses upon such low-dimensional quantum gases and discusses their respective challenges and prospects.

There is no registration fee. The Wilhelm and Else Heraeus-Foundation bears the cost of meals for accepted participants from Sao Paulo and the cost of full-board accommodation for accepted participants that are not from Sao Paulo.

Application deadline:
November 30, 2025

Online application and more information:
ictp-saifr.org/bgwehs2026



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