Leticia F. Cugliandolo

Sorbonne Université

Laboratoire de Physique Théorique et Hautes Energies

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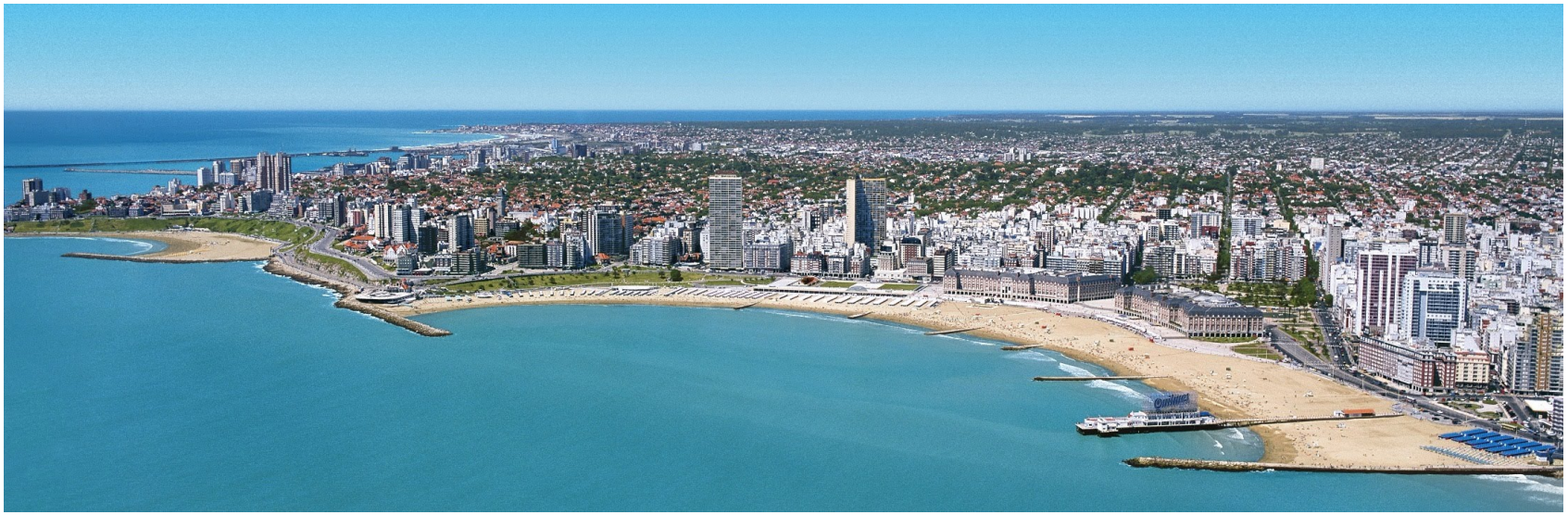
NAS, April 2025

Mar del Plata

Similar to San Diego, say



Mar del Plata

a quite place to rest by the ocean

Mar del Plata

School & first three years undergrad

MAR DEL PLATA DAY SCHOOL

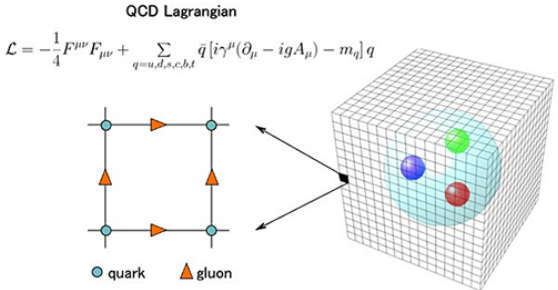
MAR DEL PLATA CLUB
Hockey Rugby

Ciencias Exactas - UNMdP

UNIVERSIDAD NACIONAL DE MAR DEL PLATA

La Plata

Theoretical Physics



4th & 5ft year of Licenciatura (Master) in Physics

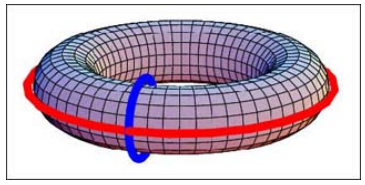
Zero-modes on the lattice: the vortex fermion system

1988, with **E. Fradkin & F. A. Schaposnik**

PhD in Physics UNLP

Topological quantum field theories

1988-1991 with **F. A. Schaposnik**



Roma

Post-doc

SAPIENZA
UNIVERSITÀ DI ROMA

Statistical Physics

Neural Networks

Spin Glasses

Non-equilibrium Dynamics

Roma

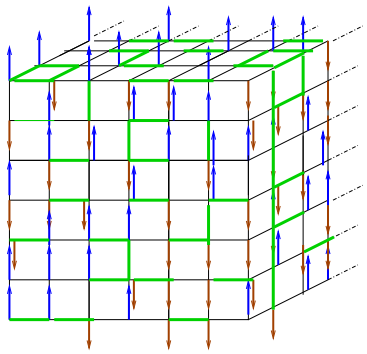
Mean-field models and aging relaxation

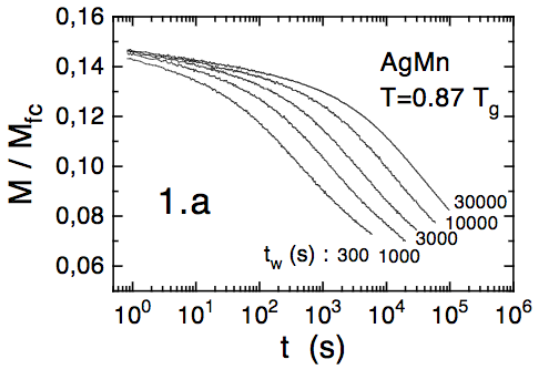
VOLUME 71, NUMBER 1 PHYSICAL REVIEW LETTERS 5 JULY 1993

Analytical Solution of the Off-Equilibrium Dynamics of a Long-Range Spin-Glass Model

L. F. Cugliandolo and J. Kurchan
Dipartimento di Fisica, Università di Roma, La Sapienza, I-00185 Roma, Italy
and Istituto Nazionale di Fisica Nucleare, Sezione di Roma I, Roma, Italy
(Received 8 March 1993)

We study the nonequilibrium relaxation of the spherical spin-glass model with p-spin interactions in the $N \to \infty$ limit. We analytically solve the asymptotics of the magnetization and the correlation and response functions for long but finite times. Even in the thermodynamic limit the system exhibits "weak" (as well as "true") ergodicity breaking and aging effects. We determine a functional Parisi-like order parameter $P_d(q)$ which plays a similar role for the dynamics to that played by the usual function for the statics.





Paris

Post-doc - Assistant Prof. at l'ENS - Prof. at Sorbonne

University of California at Santa Barbara

ICTP Trieste, Italia

University of Cambridge, UK

Univ. Buenos Aires & Mar del Plata, Argentina

1994-1996 CEA Saclay

Glasses

1997-2003 ENS Paris

Disordered Quantum System

2003-present Sorbonne University

Active Matter

Spin Ice

Path Integrals

Random Matrices

Integrability

Paris

Effective Temperatures

PHYSICAL REVIEW E VOLUME 55, NUMBER 4 APRIL 1997

Energy flow, partial equilibration, and effective temperatures in systems with slow dynamics

Leticia F. Cugliandolo*
Laboratoire de Physique Théorique des Liquides, 4 place Jussieu, F-75005 Paris, France

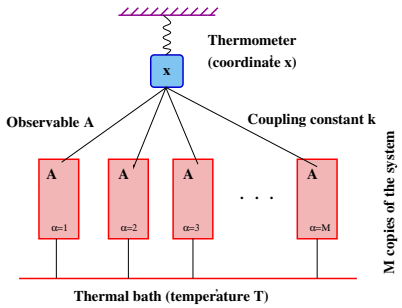
Jorge Kurchan†
École Normale Supérieure de Lyon, 46 Allée d'Italie, F-69364 Lyon Cedex 07, France

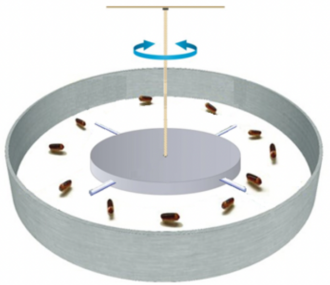
Luca Peliti‡
Groupe de Physico-Chimie Théorique, CNRS URA 1382, ESPCI, 10 rue Vauquelin, F-75231 Paris Cedex 05, France
and Dipartimento di Scienze Fisiche, Unità INFM, Università ''Federico II,'' Mostra d'Oltremare, Pad. 19, I-80125 Napoli, Italy
(Received 11 November 1996)

We show that, in nonequilibrium systems with small heat flows, there is a time-scale-dependent effective temperature that plays the same role as the thermodynamical temperature in that it controls the direction of heat flows and acts as a criterion for thermalization. We simultaneously treat the case of stationary systems with weak stirring and of glassy systems that age after cooling and show that they exhibit very similar behavior provided that time dependences are expressed in terms of the correlations of the system. We substantiate our claims with examples taken from solvable models with nontrivial low-temperature dynamics, but argue that they have a much wider range of validity. We suggest experimental checks of these ideas.
[S1063-651X(97)05903-5]

$$\lim_{\substack{t,t_w\to\infty \\ C(t,t_w)=C}} \chi(t,t_w) = \tilde{\chi}(C)$$

$$-1/T_{\rm eff}(C) = \tilde{\chi}'(C)$$





Ecole de Physique des Houches

Direction 2007-2016

Ecole de Physique des Houches

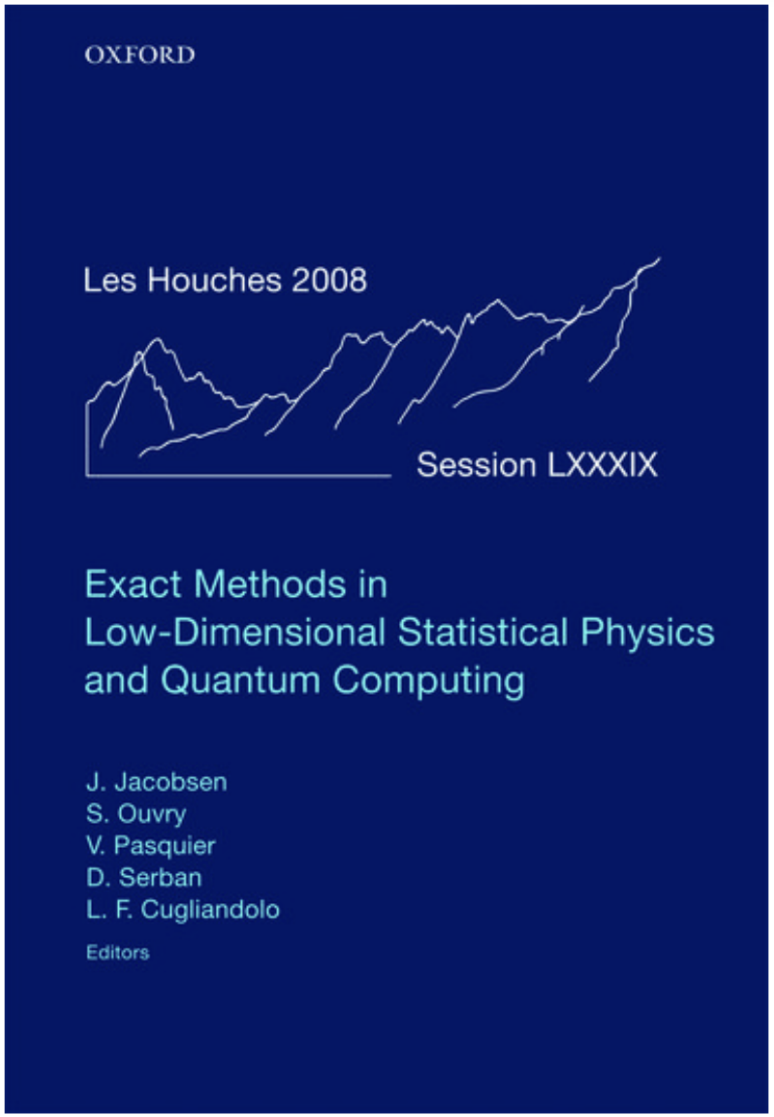
Cécile de Witt-Morette

Cecile de Witt-Morette created the Les Houches School of Physics in 1951
Professor at the Physics Department of Texas at Austin, USA

She tells stories of how she obtained the funding by tricking her way into a minister's office and then persuaded her male colleagues to support the idea by pretending that the idea was theirs.

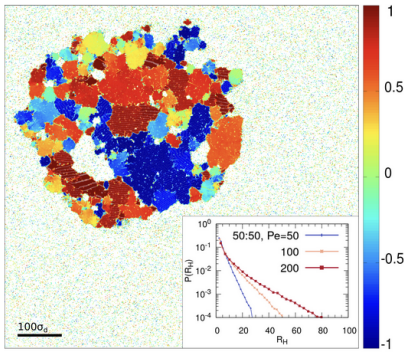
ÉCOLE DE PHYSIQUE
des HOUCHES

UNIVERSITÉ Grenoble Alpes

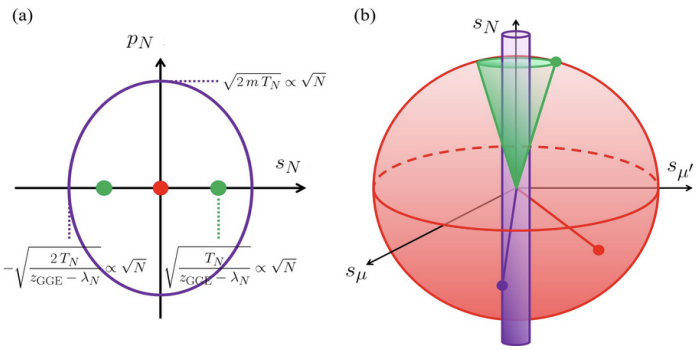


Some research interests

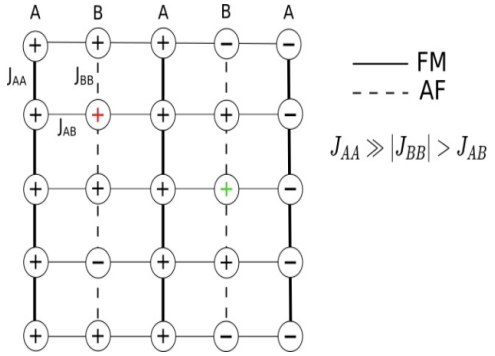
at present



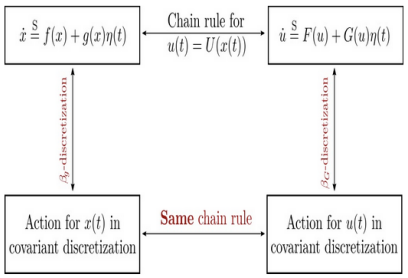
Active Brownian particles
Phases, MIPS, clusters Refs
Seminar



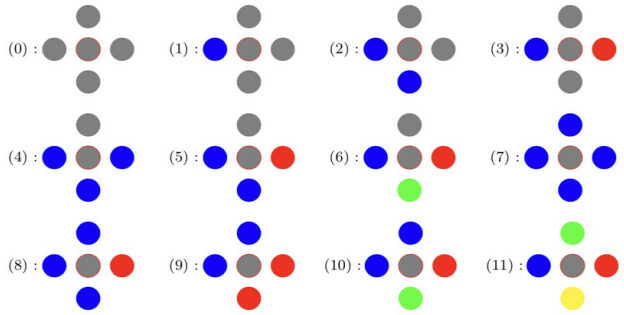
Integrability & Generalized Gibbs Ensembles
Quench dynamics in the Neumann model Refs
Seminar



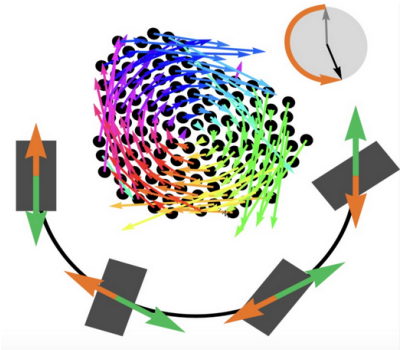
Order by Disorder in the
Domino Model Refs



Path-integral formalism Refs
Seminar



Potts model, metastability & nucleation Refs
Seminar Poster



Hamiltonian flocks Refs