



# Sistema Integral de Información Académica

## Coordinación de Planeación, Evaluación y Simplificación de la Gestión Institucional

### Reporte individual



## FRANCOIS ALAIN LEYVRAZ WALTZ

### Datos Generales

**Nombre:** FRANCOIS ALAIN LEYVRAZ WALTZ

**Máximo nivel de estudios:** DOCTORADO

**Antigüedad académica en la UNAM:** 36 años

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### Nombramientos

**Vigente:** INVESTIGADOR TITULAR C TC Definitivo

Instituto de Ciencias Físicas

Desde 01-06-2010

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### Estímulos, programas, premios y reconocimientos

SNI Emérito 2022 - VIGENTE

SNI III 2010 - 2021

SNI III 2008

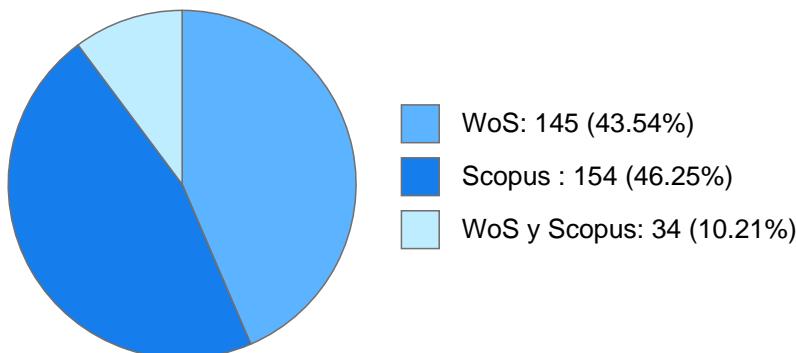
PRIDE D - 2024

PASPA Estancias Sabáticas 2008

## FRANCOIS ALAIN LEYVRAZ WALTZ

### DOCUMENTOS EN REVISTAS

#### Histórico de Documentos



#	Título	Autores	Revista	Año
1	Empirical properties of volume dynamics in the limit order book	FRANCOIS ALAIN LEYVRAZ WALTZ HERNAN LARRALDE RIDAURA Roberto Mota Navarro	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2025
2	Liouville integrability may not be what you think	FRANCOIS ALAIN LEYVRAZ WALTZ	AMERICAN JOURNAL OF PHYSICS	2025
3	Weyl channels for multipartite systems	TOMAS RICARDO BASILE ALVAREZ FRANCOIS ALAIN LEYVRAZ WALTZ CARLOS FRANCISCO PINEDA ZORRILLA et al.	PHYSICAL REVIEW A	2024
4	Time-dependent relations between gaps and returns in a Bitcoin order book	FRANCOIS ALAIN LEYVRAZ WALTZ Roberto Mota-Navarro Paulino Monroy-Castillero	QUANTITATIVE FINANCE	2022
5	Rate equation limit for a combinatorial solution of a stochastic aggregation model	FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW E	2022
6	Pauli component erasing quantum channels	FRANCOIS ALAIN LEYVRAZ WALTZ DAVID DAVALOS GONZALEZ CARLOS FRANCISCO PINEDA ZORRILLA et al.	PHYSICAL REVIEW A	2022

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7	Exact asymptotic solution of an aggregation model with a bell-shaped distribution	FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW E	2021
8	Anomalous Floquet tunneling in uniaxially strained graphene	FRANCOIS ALAIN LEYVRAZ WALTZ Yonatan Betancur-Ocampo Parisa Majari et al.	PHYSICAL REVIEW B	2021
9	Hidden duality and accidental degeneracy in cycloacene and Möbius cycloacene	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS WERNER STEGMANN THOMAS HENRY SELIGMAN SCHURCH et al.	JOURNAL OF MATHEMATICAL PHYSICS	2021
10	Ballistic annihilation in one dimension: a critical review	SOHAM BISWAS FRANCOIS ALAIN LEYVRAZ WALTZ	EUROPEAN PHYSICAL JOURNAL B	2021
11	Current vortices in aromatic carbon molecules	THOMAS WERNER STEGMANN J. A. Franco Villafane YENNI PRISCILA ORTIZ ACERO et al.	PHYSICAL REVIEW B	2020
12	Qualitative properties of systems of two complex homogeneous ODE's: A connection to polygonal billiards	FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF MATHEMATICAL PHYSICS	2020
13	New algebraically solvable systems of two autonomous first-order ordinary differential equations with purely quadratic right-hand sides	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F. Conte R.	JOURNAL OF MATHEMATICAL PHYSICS	2020
14	Electron Optics in Phosphorene pn Junctions: Negative Reflection and Anti-Super-Klein Tunneling	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS WERNER STEGMANN Betancur-Ocampo Y.	NANO LETTERS	2019
15	Time-independent Hamiltonians describing systems with friction: the $\hat{\alpha}$ ?cyclotron with friction?	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2019
16	A Hamiltonian yielding damped motion in an homogeneous magnetic field: quantum treatment	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2019
17	An approach for obtaining integrable Hamiltonians from Poisson-commuting polynomial families (vol 58, 072902, 2017)	FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF MATHEMATICAL PHYSICS	2018
18	Examples of Hamiltonians isochronous in configuration space only and their quantization	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF MATHEMATICAL PHYSICS	2018
19	Identifying long-term precursors of financial market crashes using correlation patterns	HIRDESH KUMAR PHARASI FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH et al.	NEW JOURNAL OF PHYSICS	2018



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## FRANCOIS ALAIN LEYVRAZ WALTZ

20	The peculiar (monic) polynomials, the zeros of which equal their coefficients	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2017
21	Quantum estimation of unknown parameters	CARLOS FRANCISCO PINEDA ZORRILLA FRANCOIS ALAIN LEYVRAZ WALTZ PABLO BARBERIS BLOSTEIN et al.	PHYSICAL REVIEW A	2017
22	Strange systems in statistical mechanics	FRANCOIS ALAIN LEYVRAZ WALTZ HERNAN LARRALDE RIDAURA	EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS	2017
23	An approach for obtaining integrable Hamiltonians from Poisson-commuting polynomial families	FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF MATHEMATICAL PHYSICS	2017
24	Rich structure in the correlation matrix spectra in non-equilibrium steady states	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Biswas, Soham et al.	SCIENTIFIC REPORTS	2017
25	Ballistic annihilation with superimposed diffusion in one dimension	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ Biswas S.	PHYSICAL REVIEW E	2016
26	Understanding rigid body motion in arbitrary dimensions	FRANCOIS ALAIN LEYVRAZ WALTZ	EUROPEAN JOURNAL OF PHYSICS	2015
27	Scaling anomalies in the sol-gel transition	FRANCOIS ALAIN LEYVRAZ WALTZ Lushnikov, A. A.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2015
28	Three-dimensional diffusion with helical persistence	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2015
29	The two-dimensional three-body problem in the large magnetic field limit is integrable	FRANCOIS ALAIN LEYVRAZ WALTZ Botero, A.	PHYSICS LETTERS A	2015
30	Spectral statistics of the acoustic stadium	RAFAEL ALBERTO MENDEZ SANCHEZ FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH et al.	AIP Conference Proceedings	2014

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31	A Finite Element Algorithm for High-Lying Eigenvalues with Neumann and Dirichlet Boundary Conditions	RAFAEL ALBERTO MENDEZ SANCHEZ FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH et al.	AIP Conference Proceedings	2014
32	A nonautonomous yet solvable discrete-time N-body problem	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2014
33	Many-Body Problem with Quadratic and/or Inversely-Quadratic Potentials in One- and More-Dimensional Spaces: Some Retrospective Remarks	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF STATISTICAL PHYSICS	2014
34	A large class of solvable discrete-time many-body problems	FRANCOIS ALAIN LEYVRAZ WALTZ Bruschi, Mario Calogero, Francesco	JOURNAL OF MATHEMATICAL PHYSICS	2014
35	Temperature gradients in equilibrium: Small microcanonical systems in an external field	Alberto Salazar HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW E	2014
36	A macroscopic system with undamped periodic compressional oscillations	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	4TH EUROPEAN SYMPOSIUM ON FIRE SAFETY SCIENCE	2014
37	A Macroscopic System with Undamped Periodic Compressional Oscillations	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF STATISTICAL PHYSICS	2013
38	Fidelity under isospectral perturbations: A random matrix study	FRANCOIS ALAIN LEYVRAZ WALTZ ADOLFO GARCIA OSUNA THOMAS HENRY SELIGMAN SCHURCH et al.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2013
39	New solvable discrete-time many-body problem featuring several arbitrary parameters. II	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF MATHEMATICAL PHYSICS	2013
40	Scaling theory for systems with instantaneous gelation: partial results	FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2012
41	New solvable discrete-time many-body problem featuring several arbitrary parameters	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF MATHEMATICAL PHYSICS	2012



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42	Identifying states of a financial market	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Münnix M.C. et al.	SCIENTIFIC REPORTS	2012
43	Novel rate equations describing isochronous chemical reactions	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F. Sommacal, M.	JOURNAL OF MATHEMATICAL CHEMISTRY	2011
44	Isochronous Systems, the Arrow of Time, and the Definition of Deterministic Chaos	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, Francesco	LETTERS IN MATHEMATICAL PHYSICS	2011
45	AN INVERTIBLE TRANSFORMATION AND SOME OF ITS APPLICATIONS	FRANCOIS ALAIN LEYVRAZ WALTZ Bruschi, M. Calogero, F. et al.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2011
46	Correlations between spectra with different symmetries: any chance to be observed?	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Braun, P.	NEW JOURNAL OF PHYSICS	2011
47	GENERALIZATION OF AN INVERTIBLE TRANSFORMATION AND EXAMPLES OF ITS APPLICATIONS	FRANCOIS ALAIN LEYVRAZ WALTZ Bruschi, M. Calogero, F. et al.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2011
48	ISOCHRONOUS OSCILLATORS	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2010
49	SOLVABLE SYSTEMS OF ISOCHRONOUS, MULTI-PERIODIC OR ASYMPTOTICALLY ISOCHRONOUS NONLINEAR OSCILLATORS	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2010
50	Isochronous rate equations describing chemical reactions	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F. Sommacal, M.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2010
51	Short-time Poincare recurrence in a broad class of many-body systems	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT	2009
52	How to embed an arbitrary Hamiltonian dynamics in a superintegrable (or just integrable) Hamiltonian dynamics	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2009

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53	Ramirez-Hernandez, Larralde, and Leyvraz Reply	A. Ramirez Hernandez HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW LETTERS	2009
54	Oscillatory and isochronous rate equations possibly describing chemical reactions	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2009
55	Fluctuation theorem for currents in the Spinning Lorentz Gas	A. Salazar FRANCOIS ALAIN LEYVRAZ WALTZ HERNAN LARRALDE RIDAURA	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2009
56	HOW TO EXTEND ANY DYNAMICAL SYSTEM SO THAT IT BECOMES ISOCHRONOUS, ASYMPTOTICALLY ISOCHRONOUS OR MULTI-PERIODIC	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2009
57	Spontaneous reversal of irreversible processes in a many-body Hamiltonian evolution	F. Calogero FRANCOIS ALAIN LEYVRAZ WALTZ	NEW JOURNAL OF PHYSICS	2008
58	Violation of the zeroth law of thermodynamics in systems with negative specific heat	A. Ramirez Hernandez HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW LETTERS	2008
59	Examples of isochronous Hamiltonians: classical and quantal treatments	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2008
60	Surprising relations between parametric level correlations and fidelity decay	CARLOS FRANCISCO PINEDA ZORRILLA FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH et al.	PHYSICAL REVIEW LETTERS	2008
61	A new class of isochronous dynamical systems	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero, F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2008
62	Analytical approach to the time-dependent probability density function in tilted periodic potentials	R. Salgado Garcia FRANCOIS ALAIN LEYVRAZ WALTZ GUSTAVO CARLOS MARTINEZ MEKLER	PHYSICAL REVIEW E	2008
63	Systems with negative specific heat in thermal contact: Violation of the zeroth law	A. Ramirez Hernandez HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW E	2008

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64	Erratum: Competitive nucleation and the Ostwald rule in a generalized Potts model with multiple metastable phases (Physical Review B – Condensed Matter and Materials Physics (2007) 75, (132101))	DAVID PHILIP SANDERS HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW B	2007
65	General technique to produce isochronous Hamiltonians	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL	2007
66	Competitive nucleation and the Ostwald rule in a generalized Potts model with multiple metastable phases	DAVID PHILIP SANDERS HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW B	2007
67	Isochronous extension of the Hamiltonian describing free motion in the Poincaré half-plane: Classical and quantum treatments	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.A.	JOURNAL OF MATHEMATICAL PHYSICS	2007
68	On a new technique to manufacture isochronous Hamiltonian systems: Classical and quantal treatments	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2007
69	Metastability in Markov processes	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ DAVID PHILIP SANDERS	JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT	2006
70	Scaling theory for gelling systems: Work in progress	FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICA D-NONLINEAR PHENOMENA	2006
71	Equilibrium statistical mechanics for single waves and wave spectra in Langmuir wave-particle interaction	FRANCOIS ALAIN LEYVRAZ WALTZ Firpo M.-C. Attuel G.	PHYSICS OF PLASMAS	2006
72	A definition of metastability for Markov processes with detailed balance	FRANCOIS ALAIN LEYVRAZ WALTZ HERNAN LARRALDE RIDAURA DAVID PHILIP SANDERS	EUROPEAN PHYSICAL JOURNAL B	2006
73	Isochronous and partially isochronous Hamiltonian systems are not rare	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	JOURNAL OF MATHEMATICAL PHYSICS	2006
74	On a class of Hamiltonians with (classical) isochronous motions and (quantal) equi-spaced spectra	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	J PHYS A-MATH GEN	2006



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75	Rigorous results in the scaling theory of irreversible aggregation kinetics	FRANCOIS ALAIN LEYVRAZ WALTZ	JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS	2005
76	Metastability for Markov processes with detailed balance	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW LETTERS	2005
77	Size and resources driven migration resulting in a power-law distribution of cities	FRANCOIS ALAIN LEYVRAZ WALTZ Semboloni F.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2005
78	Large-N scaling behavior of the Lipkin-Meshkov-Glick model	FRANCOIS ALAIN LEYVRAZ WALTZ Heiss W.D.	PHYSICAL REVIEW LETTERS	2005
79	Fluctuation-Dissipation Theorem for Metastable Systems	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ RAFAEL ALBERTO MENDEZ SANCHEZ et al.	PHYSICAL REVIEW LETTERS	2003
80	Phase Shift Experiments Identifying Kramers Doublets in a Chaotic Superconducting Microwave Billiard of Threelfold Symmetry	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Dembowski C. et al.	PHYSICAL REVIEW LETTERS	2003
81	Wigner-Dyson statistics for a class of integrable models	LUIS BENET FERNANDEZ FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH	PHYS REV E	2003
82	Transport Properties of a Modified Lorentz Gas	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ Mejía-Monasterio C.	JOURNAL OF STATISTICAL PHYSICS	2003
83	Fluctuations of wavefunctions about their classical average	LUIS BENET FERNANDEZ JORGE ALBERTO MARQUEZ FLORES FRANCOIS ALAIN LEYVRAZ WALTZ et al.	J PHYS A-MATH GEN	2003
84	Phase shift experiments identifying Kramers doublets in a chaotic superconducting microwave billiard of threelfold symmetry	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Dembowski C. et al.	PHYSICAL REVIEW LETTERS	2003
85	Integrability of interacting two-level boson systems	LUIS BENET FERNANDEZ CHRISTOF FRIEDRICH JUNG KOHL FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	2003
86	Scaling theory and exactly solved models in the kinetics of irreversible aggregation	FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICS REPORTS-REVIEWS SECTION OF PHYSICS LETTERS	2003



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87	Fluctuation-dissipation theorem for metastable systems	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ RAFAEL ALBERTO MENDEZ SANCHEZ et al.	PHYSICAL REVIEW LETTERS	2003
88	Ensemble inequivalence: A formal approach	FRANCOIS ALAIN LEYVRAZ WALTZ Ruffo S.	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	2002
89	Transition from Gaussian-orthogonal to Gaussian-unitary ensemble in a microwave billiard with threefold symmetry	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Schäfer R. et al.	PHYSICAL REVIEW E	2002
90	Scaling theory for migration-driven aggregate growth	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW LETTERS	2002
91	Ensemble inequivalence in systems with long-range interactions	FRANCOIS ALAIN LEYVRAZ WALTZ Ruffo S.	J PHYS A-MATH GEN	2002
92	Inhomogeneous quasi-stationary states in a mean-field model with repulsive cosine interactions	FRANCOIS ALAIN LEYVRAZ WALTZ Firpo M.-C. Ruffo S.	J PHYS A-MATH GEN	2002
93	Transport properties of the diluted Lorentz slab	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ GUSTAVO CARLOS MARTINEZ MEKLER et al.	PHYSICAL REVIEW E	2001
94	Coupled normal heat and matter transport in a simple model system	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ Mejía-Monasterio C.	PHYSICAL REVIEW LETTERS	2001
95	A diffusion model for classical chaotic compound scattering	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Lombardi M.	PHYSICA D-NONLINEAR PHENOMENA	2001
96	New results on a parity-dependent model of aggregation kinetics	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	J PHYS A-MATH GEN	2000
97	Multichannel quantum defect theory: A quantum Poincare map	FRANCOIS ALAIN LEYVRAZ WALTZ RAFAEL ALBERTO MENDEZ SANCHEZ THOMAS HENRY SELIGMAN SCHURCH et al.	PHYSICS LETTERS A	2000
98	Connectivity of growing random networks	FRANCOIS ALAIN LEYVRAZ WALTZ Krapivsky P.L. Redner S.	PHYSICAL REVIEW LETTERS	2000
99	Structural invariance and the energy spectrum	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Mendez R.A.	J PHYS A-MATH GEN	1999

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100	Scaling and crossover properties of a new solvable model of aggregation kinetics	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH	1999
101	A new solvable model of aggregation kinetics	FRANCOIS ALAIN LEYVRAZ WALTZ Calogero F.	J PHYS A-MATH	1999
102	Transmission and scattering of a Lorentz gas on a slab	HERNAN LARRALDE RIDAURA FRANCOIS ALAIN LEYVRAZ WALTZ GUSTAVO CARLOS MARTINEZ MEKLER et al.	PHYS REV E	1998
103	Accidental degeneracy and hidden symmetry: Rectangular wells with commensurate sides	RENATO LEMUS CASILLAS ALEJANDRO FRANK HOEFLICH FRANCOIS ALAIN LEYVRAZ WALTZ et al.	AMERICAN JOURNAL OF PHYSICS	1998
104	Intruder states and their local effect on spectral statistics	JORGE ALBERTO MARQUEZ FLORES FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH et al.	J PHYS A-MATH	1998
105	Colloidal aggregation with a drift: a computer simulation	FRANCOIS ALAIN LEYVRAZ WALTZ Gonzalez Agustin E.	Materials Research Society Symposium Proceedings	1997
106	Accidental degeneracy in a simple quantum system: A new symmetry group for a particle in an impenetrable square-well potential	FRANCOIS ALAIN LEYVRAZ WALTZ ALEJANDRO FRANK HOEFLICH RENATO LEMUS CASILLAS et al.	AMERICAN JOURNAL OF PHYSICS	1997
107	Distribution of eigenvalues for the modular group	FRANCOIS ALAIN LEYVRAZ WALTZ Bogomolny E. Schmit C.	COMMUNICATIONS IN MATHEMATICAL PHYSICS	1996
108	Anomalous spectral statistics in a symmetrical billiard	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Schmit C.	J PHYS A-MATH	1996
109	Quantum representation of a time-dependent quadratic Hamiltonian in a time-dependent phase space frame	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Man'ko V.I.	PHYSICS LETTERS A	1996
110	The level splitting distribution in chaos-assisted tunnelling	FRANCOIS ALAIN LEYVRAZ WALTZ Ullmo D.	J PHYS A-MATH	1996
111	Ballistic annihilation kinetics: The case of discrete velocity distributions	FRANCOIS ALAIN LEYVRAZ WALTZ Krapivsky P.L. Redner S.	PHYS REV E	1995
112	Propagation and extinction in branching annihilating random walks	FRANCOIS ALAIN LEYVRAZ WALTZ Ben-Avraham D. Redner S.	PHYS REV E	1994
113	Kinetics of ballistically-controlled reactions	FRANCOIS ALAIN LEYVRAZ WALTZ Ben-Naim E. Krapivsky P. et al.	J PHYS CHEM-US	1994



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## FRANCOIS ALAIN LEYVRAZ WALTZ

114	Kinetic properties of ballistic aggregation	FRANCOIS ALAIN LEYVRAZ WALTZ Jiang Y.	PHYS REV E	1994
115	Kinetics of two-species ballistic annihilation	FRANCOIS ALAIN LEYVRAZ WALTZ Jiang Y.	PHYS REV E	1994
116	Scaling theory for ballistic aggregation	FRANCOIS ALAIN LEYVRAZ WALTZ Jiang Y.	J PHYS A-MATH GEN	1993
117	Decay kinetics of ballistic annihilation	FRANCOIS ALAIN LEYVRAZ WALTZ Ben-Naim E. Redner S.	PHYSICAL REVIEW LETTERS	1993
118	Self-consistent perturbation theory for random matrix ensembles: II	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1993
119	Structural invariance and the statistics of quasi-energies	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH	PHYSICS LETTERS A	1992
120	Two-species annihilation in three dimensions: A numerical study	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1992
121	Spatial structure in diffusion-limited two-species annihilation	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW A	1992
122	Quantum-mechanical representations of canonical transformations and adiabatic invariance	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH	Journal Of Soviet Laser Research	1992
123	Superballistic motion in a random-walk shear flow	FRANCOIS ALAIN LEYVRAZ WALTZ Ben-Avraham D. Redner S.	PHYSICAL REVIEW A	1992
124	Novel signature of chaos in quantum-mechanical states	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH Quezada J. et al.	PHYSICAL REVIEW LETTERS	1991
125	Transport matrices for nonlinear lattice functions	ARMANDO ANTILLON DIAZ FRANCOIS ALAIN LEYVRAZ WALTZ Forest E. et al.	NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETER S DETECTORS AND ASSOCIATED EQUIPMENT	1991
126	Spatial organization in the two-species annihilation reaction A+B	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW LETTERS	1991
127	Spatial organization in two-species annihilation	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	JOURNAL OF STATISTICAL PHYSICS	1991

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## FRANCOIS ALAIN LEYVRAZ WALTZ

128	Hidden symmetry and potential group of the Maxwell fish-eye	ALEJANDRO FRANK HOEFLICH FRANCOIS ALAIN LEYVRAZ WALTZ KURT BERNARDO WOLF BOGNER	JOURNAL OF MATHEMATICAL PHYSICS	1990
129	Self-consistent perturbation theory for random matrix ensembles	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH	J PHYS A-MATH GEN	1990
130	Exact relations between kinetic gelation and percolation	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1990
131	Sequences of point transformations and linear canonical transformations in classical and quantum mechanics	FRANCOIS ALAIN LEYVRAZ WALTZ THOMAS HENRY SELIGMAN SCHURCH	JOURNAL OF MATHEMATICAL PHYSICS	1989
132	Coagulation with a steady point monomer source	FRANCOIS ALAIN LEYVRAZ WALTZ Cheng Z. Redner S.	PHYSICAL REVIEW LETTERS	1989
133	Diffusion in the presence of quenched random bias fields: A two-dimensional generalization of the Sinai model	FRANCOIS ALAIN LEYVRAZ WALTZ Blumberg Selinger R.L. Havlin S. et al.	PHYSICAL REVIEW A	1989
134	Reply to 'Critical dynamics of the spin-exchange model in quasilinear fractal geometries'	FRANCOIS ALAIN LEYVRAZ WALTZ Jan N.	J PHYS A-MATH GEN	1987
135	Nonuniversality and breakdown of scaling in two-species aggregation	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW A	1987
136	Universal kinetics in reaction-limited aggregation	FRANCOIS ALAIN LEYVRAZ WALTZ Ball R.C. Weitz D.A. et al.	PHYSICAL REVIEW LETTERS	1987
137	Probability distribution for percolation clusters generated on a cayley tree at criticality	FRANCOIS ALAIN LEYVRAZ WALTZ Havlin S. Kiefer J.E. et al.	JOURNAL OF STATISTICAL PHYSICS	1987
138	Quasielastic-scattering linewidths and relaxation times for surface and mass fractals	FRANCOIS ALAIN LEYVRAZ WALTZ Martin J.E.	PHYSICAL REVIEW A	1986
139	The random normal superconductor mixture in one dimension	FRANCOIS ALAIN LEYVRAZ WALTZ Bunde A. Coniglio A. et al.	J PHYS A-MATH GEN	1986
140	Crystalline nucleation in deeply quenched liquids	FRANCOIS ALAIN LEYVRAZ WALTZ Klein W.	PHYSICAL REVIEW LETTERS	1986
141	On the relation of kinetic gelation and percolation	FRANCOIS ALAIN LEYVRAZ WALTZ Jan N. Coniglio A. et al.	J PHYS A-MATH GEN	1986
142	Long-time crossover phenomena in coagulation kinetics	FRANCOIS ALAIN LEYVRAZ WALTZ Kang K. Redner S. et al.	PHYSICAL REVIEW A	1986
143	Erratum: Nonuniversality and breakdown of scaling in a two-component coagulation model (Physical Review Letters (1986) 57, 24 (3123))	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW LETTERS	1986



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144	Nonuniversality and breakdown of scaling in a two-component coagulation model	FRANCOIS ALAIN LEYVRAZ WALTZ Redner S.	PHYSICAL REVIEW LETTERS	1986
145	Critical dynamics for one-dimensional models	FRANCOIS ALAIN LEYVRAZ WALTZ Jan N.	J PHYS A-MATH GEN	1986
146	New class of screened growth aggregates with a continuously tunable fractal dimension	FRANCOIS ALAIN LEYVRAZ WALTZ Meakin P. Stanley H.E.	PHYSICAL REVIEW A	1985
147	The 'active perimeter' in cluster growth models: A rigorous bound	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1985
148	New exactly solvable models of smoluchowski's equations of coagulation	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1985
149	Large-time behavior of the Smoluchowski equations of coagulation	FRANCOIS ALAIN LEYVRAZ WALTZ	PHYSICAL REVIEW A	1984
150	Smoluchowski's equation and the $\beta$ -exponent for branched polymers	FRANCOIS ALAIN LEYVRAZ WALTZ Ernst M.H. Hendriks E.M.	J PHYS A-MATH GEN	1984
151	Resistive transition in two-dimensional arrays of proximity Josephson junctions: Magnetic field dependence	FRANCOIS ALAIN LEYVRAZ WALTZ Kimhi D. Ariosa D.	PHYSICAL REVIEW B	1984
152	To what class of fractals does the alexander-orbach conjecture apply?	FRANCOIS ALAIN LEYVRAZ WALTZ Stanley H.E.	PHYSICAL REVIEW LETTERS	1983
153	Existence and properties of post-gel solutions for the kinetic equations of coagulation	FRANCOIS ALAIN LEYVRAZ WALTZ	J PHYS A-MATH GEN	1983
154	Critical kinetics near gelation	FRANCOIS ALAIN LEYVRAZ WALTZ Tschudi H.R.	J PHYS A-MATH GEN	1982
155	Singularities in the kinetics of coagulation processes	FRANCOIS ALAIN LEYVRAZ WALTZ Tschudi H.R.	J PHYS A-MATH GEN	1981
156	An exactly solvable model for externally controlled coagulation	FRANCOIS ALAIN LEYVRAZ WALTZ Tschudi H.R.	J PHYS A-MATH GEN	1980



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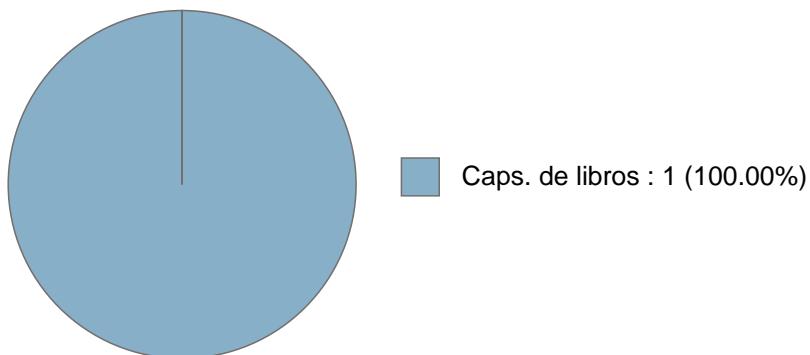
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**FRANCOIS ALAIN LEYVRAZ WALTZ**

#### LIBROS Y CAPITULOS CON ISBN

##### Obras con registro ISBN



#	Título	Autores	Alcance	Año	ISBN
1	Connectivity of growing random networks	FRANCOIS ALAIN LEYVRAZ WALTZ Krapivsky P.L. Redner S.	Capítulo de un Libro	2011	9781400841356



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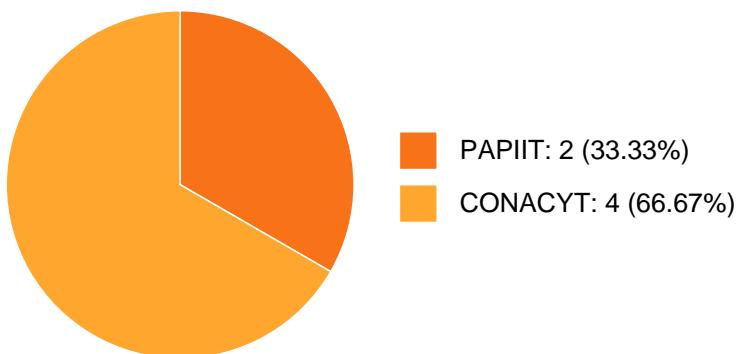


### Reporte individual

## FRANCOIS ALAIN LEYVRAZ WALTZ

### PARTICIPACIÓN EN PROYECTOS

#### Histórico de participación en proyectos



#	Nombre	Participantes	Fuente	Fecha inicio	Fecha fin
1	Transiciones de Fase en Sistemas Lejos de Equilibrio (Continuación)	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos CONACYT	02-09-2016	02-03-2020
2	Transporte En Sistemas Pequeños, Clasicos Y Cuanticos	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos CONACYT	28-11-2016	27-11-2018
3	Sistemas de muchos cuerpos en y fuera de equilibrio	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos PAPIIT	01-01-2017	31-12-2019
4	Transporte En Sistemas Pequeños, Clásicos Y Cuánticos.	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos CONACYT	28-11-2016	28-05-2019
5	Fenómenos lejos del equilibrio en sistemas cuánticos y clásicos.	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos PAPIIT	01-01-2020	31-12-2022
6	Transiciones de fase en sistemas lejos de equilibrio (Continuación).	FRANCOIS ALAIN LEYVRAZ WALTZ	Recursos CONACYT	02-09-2016	02-03-2021



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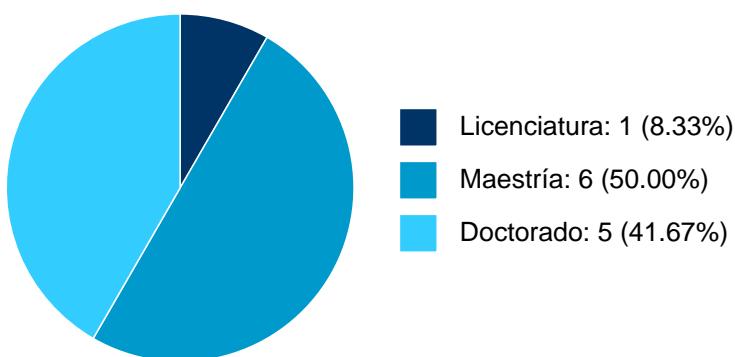


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## FRANCOIS ALAIN LEYVRAZ WALTZ

### PARTICIPACIÓN EN TESIS

#### Histórico de Colaboraciones en Tesis



#	Título del documento	Tipo de Tesis	Sinodales	Autores	Entidad	Año
1	Pauli channels of multiparticle systems	Tesis de Maestría	FRANCOIS ALAIN LEYVRAZ WALTZ,	CARLOS FRANCISCO PINEDA ZORRILLA, León Garrido, José Alfredo de,	Instituto de Ciencias Físicas, Instituto de Física,	2024
2	Propiedades estadísticas dependientes del tiempo en un libro de órdenes de bitcóin	Tesis de Doctorado	FRANCOIS ALAIN LEYVRAZ WALTZ,	Mota Navarro, Roberto,	Instituto de Ciencias Físicas,	2023
3	Estudio numérico de percolación explosiva en redes aleatorias	Tesis de Maestría	FRANCOIS ALAIN LEYVRAZ WALTZ,	Andrade Ocejo, Daniel Esteban,	Instituto de Ciencias Físicas,	2022
4	Transporte electrónico en grafeno : analogías de la óptica de gradiente de índice y uniones PN con defectos	Tesis de Maestría	JOSE EDUARDO BARRIOS VARGAS,	FRANCOIS ALAIN LEYVRAZ WALTZ, Paredes Rocha, José Emmanuel,	Facultad de Química, Instituto de Ciencias Físicas,	2021



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5	Caracterización estadística de mercados europeos	Tesis de Maestría	FRANCOIS ALAIN LEYVRAZ WALTZ,	Martínez Ramos, Manuel Mijail,	Instituto de Ciencias Físicas,	2018
6	Comb-like turing patterns embedded in hopf oscillations	Tesis de Doctorado	FRANCOIS ALAIN LEYVRAZ WALTZ,	Monroy Castillero, Paulino,	Instituto de Ciencias Físicas,	2017
7	Técnicas nuevas en el análisis de mercados de valores	Tesis de Maestría	FRANCOIS ALAIN LEYVRAZ WALTZ,	Morales Hernández, José Francisco,	Instituto de Ciencias Físicas,	2016
8	Decaimiento de fidelidad para perturbaciones isoespectrales	Tesis de Maestría	LUIS BENET FERNANDEZ,	FRANCOIS ALAIN LEYVRAZ WALTZ, CARLOS FRANCISCO PINEDA ZORRILLA, et al.	Instituto de Ciencias Físicas, Instituto de Física,	2011
9	Propiedades termodinámicas de sistemas pequeños confinados	Tesis de Licenciatura	FRANCOIS ALAIN LEYVRAZ WALTZ,	Batta Márquez, Aldo Alberto,	Instituto de Ciencias Físicas,	2008
10	Teorema fluctuacion-disipacion para sistemas markovianos en estado metaestable	Tesis de Doctorado	HERNAN LARRALDE RIDAURA,	FRANCOIS ALAIN LEYVRAZ WALTZ, Baez Juarez, Maria Gabriela,		2003
11	Propiedades estadísticas de sistemas semiclassicos con pocas partículas	Tesis de Doctorado	FRANCOIS ALAIN LEYVRAZ WALTZ,	Hernandez Saldaña, Hugo,		2002
12	Estadistica espectral : de eigenfases a energias	Tesis de Doctorado	FRANCOIS ALAIN LEYVRAZ WALTZ,	Méndez Sánchez, Rafael Alberto,		1998



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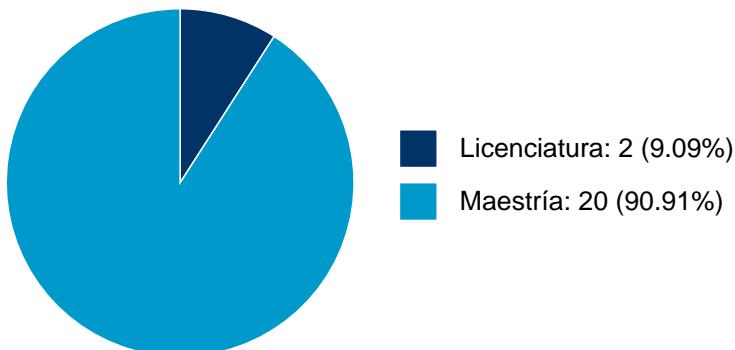


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**FRANCOIS ALAIN LEYVRAZ WALTZ**

#### DOCENCIA IMPARTIDA

#### Histórico de docencia



#	Nivel titulación	Asignatura	Entidad	Alumnos	Semestre
1	Maestría	MECÁNICA CLÁSICA I	Instituto de Ciencias Físicas	6	2023-2
2	Maestría	MECÁNICA CLÁSICA I	Instituto de Ciencias Físicas	9	2022-2
3	Maestría	MECÁNICA CLÁSICA I	Instituto de Ciencias Físicas	8	2022-1
4	Maestría	MECÁNICA CLÁSICA I	Instituto de Ciencias Físicas	1	2021-2
5	Maestría	FÍSICA ESTADÍSTICA	Instituto de Ciencias Físicas	1	2021-1
6	Maestría	FÍSICA ESTADÍSTICA I	Instituto de Ciencias Físicas	1	2021-1
7	Maestría	SEMINARIO DE INVESTIGACIÓN II	Instituto de Ciencias del Mar y Limnología	1	2020-2
8	Maestría	FÍSICA ESTADÍSTICA I	Instituto de Ciencias del Mar y Limnología	5	2020-2
9	Maestría	SEMINARIO DE INVESTIGACIÓN I	Instituto de Ciencias del Mar y Limnología	1	2020-1
10	Maestría	FÍSICA ESTADÍSTICA II	Instituto de Ciencias Físicas	1	2019-2
11	Maestría	FÍSICA ESTADÍSTICA	Instituto de Ciencias Físicas	2	2019-1



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12	Maestría	MECANICA CLASICA	Instituto de Ciencias del Mar y Limnología	1	2018-2
13	Maestría	ELECTRODINAMICA CLASICA-394322	Instituto de Ciencias Físicas	1	2017-1
14	Maestría	TEMAS SELECTOS	Instituto de Ciencias Físicas	2	2016-1
15	Maestría	FISICA NO LINEAL Y SISTEMAS COMPLEJOS	Instituto de Ciencias Físicas	2	2015-2
16	Maestría	MECANICA CLASICA	Instituto de Ciencias Físicas	1	2015-1
17	Maestría	FISICA ESTADISTICA	Instituto de Ciencias Físicas	1	2014-2
18	Maestría	ELECTRODINAMICA CLASICA	Instituto de Ciencias Físicas	1	2013-2
19	Maestría	FISICA ESTADISTICA	Instituto de Ciencias Físicas	8	2013-1
20	Maestría	MECANICA CUANTICA II	Instituto de Ciencias Físicas	3	2013-1
21	Licenciatura	FENOMENOS COLECTIVOS	Facultad de Ciencias	13	2012-1
22	Licenciatura	FENOMENOS COLECTIVOS	Facultad de Ciencias	13	2008-1



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**Coordinación de Planeación, Evaluación y  
Simplificación de la Gestión Institucional**

**Reporte individual**



**FRANCOIS ALAIN LEYVRAZ WALTZ**

## PATENTES

**No se encuentran registros en la base de datos de patentes asociados a:**

**FRANCOIS ALAIN LEYVRAZ WALTZ**



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### Reporte individual

**FRANCOIS ALAIN LEYVRAZ WALTZ**

## FUENTES DE INFORMACIÓN

### Internos

#	Información	Fuente	Sistema	Periodo
1	Grupos ordinarios y resumen de historias académicas	DGAE	SIAE	2008-2025
2	Nombramientos, datos generales, estímulos, premios y reconocimientos	DGAPA	RUPA	2008-2025
3	Producción Académica	CH	Humanindex	2008-2021
4	Producción Académica	CIC	SCIC	2000-2017
5	Proyectos	DGPO	SISEPRO	2018-2022
6	Tesis	DGB	TESIUNAM	2008-2025
7	Tutorías en Posgrado	CGEP	SIIPosgrado	2008-2021

### Externos

#	Información	Fuente	Sistema	Periodo
8	Documentos Indexados	Elsevier	Scopus	2008-2025
9	Documentos Indexados	Thomson Reuters	WoS	2008-2025
10	Obras con registro ISBN	INDAUTOR	Agencia ISBN	2008-2025
11	Patentes	IMPI	SIGA	2008-2024