

## CURRICULUM VITAE OF DIEGO WISNIACKI

**Name:** Diego Ariel Wisniacki

**Birth date:** 22/1/1968

**Birth Place:** Buenos Aires, Argentina

**Telephone number:** +541145763390 int 819 (Bussines).

**Bussines Adress:** Pabellon 1 Ciudad Universitaria, Buenos Aires, Argentina.

**e-mail:** [wisniacki@df.uba.ar](mailto:wisniacki@df.uba.ar)

### DEGREES

- Licenciatura en Ciencias Físicas. FCEyN - University of Buenos Aires, (1994).

- Doctor in Physics. FCEyN - University of Buenos Aires, (2000).

### CURRENT POSITIONS

-Professor, CBC--UBA, Argentina

-Fellow of CONICET (Argentina). Level: Investigador Independiente

### TEACHING EXPERIENCE

-**Assistant professor.** Physics Department., University of Buenos Aires . From 2012.

-**Invited Lecturer** in 'programa interuniversitario de Doctorado de sistemas complejos'. University Politécnica of Madrid. June-July 2010.

-**Assistant professor.** Ciclo Básico Comun UBA. From 2005-.

-**Jefe de Trabajos Prácticos.** Departamento de Física de la F.C.E.y N. U.B.A. (1999-2005)

-**Teaching assistant.** Departamento de Física de la F.C.E.y N. U.B.A. (1993-1999).

-**Teaching assistant.** Departamento de Matemática del Ciclo Básico Común. (1989 -1993).

### LIST OF PUBLICATIONS

1.- "Characterization of Landau-Zener Transitions in Systems with Complex Spectra" M. J. Sanchez, E. Vergini and D. A. Wisniacki , Phys. Rev. E **54** 4812 (1996).

2.- "Classical and quantum decay of one dimensional finite wells with oscillating walls", A. Fendrik and D. A. Wisniacki, Phys. Rev. E **55** 6507 (1997).

3.- "Localized Structures Embebed in the Eigenfunctions of chaotic hamiltonian systems", E. Vergini and D. A. Wisniacki, Phys. Rev. E **58**, R5225 (1998).

4.- "Influence of phase-space localization on the energy diffusion in a quantum chaotic billiard" D. A. Wisniacki and E. Vergini, Phys. Rev. E **59** 6579 (1999).

5.- "Classical invariants and the quantum-classical link" D. A. Wisniacki and E. Vergini, Phys. Rev. E **62**, R4513 (2000).

6.- "Beyond the first recurrence time in scar phenomena" D. A. Wisniacki, F. Borondo, E. Vergini and R. Benito. Phys. Rev. E **62** R7583 (2000).

7.- "Localization proprieties of groups of eigenstates in chaotic systems" D. A. Wisniacki, F. Borondo, E. Vergini and R. Benito. Phys. Rev. E **63** 066220-1(2001).

- 8.-** "Decoherence as decay of the Loschmidt echo in a Lorentz gas" F. Cucchietti, H. Pastawski and D. A. Wisniacki, Phys. Rev. E **65**, 045206 (R) (2002). Invited article 'The Virtual Journal of Quantum Information' April, 2002.
- 9.-** "Sensitivity to perturbations in a quantum chaotic billiard" D. A. Wisniacki, E. Vergini, H. M. Pastawski and F. Cucchietti, Phys. Rev. E **65**, 055206 (R) (2002).
- 10.-** "Quantum irreversibility, perturbation independent decay, and the parametric theory of the local density of states" D. A. Wisniacki and D. Cohen, Phys. Rev. E **66**, 046209 (2002).
- 11.-** "Short time decay of the Loschmidt echo" D. A. Wisniacki, Phys. Rev. E **67**, 016205 (2003).
- 12.-** "Stadium Billiard with moving walls" , D. Cohen and D. A. Wisniacki, Phys. Rev. E **67**, 026206 (2003). Invited article 'The Virtual Journal of Nanoscale Science and Technology' 24 de february de 2003.
- 13.-** "Different Time Scales in Wave Function Intensity Statistics" D. A. Wisniacki, F. Borondo, E. Vergini and R. Benito. Phys. Rev. E **67**, 066212 (2003).
- 14.-** "Dynamics of quantum trajectories in chaotic systems" D. A. Wisniacki, F. Borondo, and R. Benito. Europhysics Letters **64**, 441 (2003).
- 15.-** "Classical invariants and the quantization of chaotic systems" D. A. Wisniacki, F. Borondo, E. Vergini and R. Benito. Phys. Rev. E **70**, 035202(R) (2004).
- 16.-** "Smoothing Wigner function: a new representation of quantum mechanics" A. F. Rivas, E. Vergini and D. A. Wisniacki. The European Journal of Physics D, **32** 355 (2005)
- 17.-** "Signatures of homoclinic motion in quantum chaos" D. A. Wisniacki, F. Borondo, E. Vergini and R. Benito. Phys. Rev. Lett. **94** 054101 2005.
- 18.-** "Homoclinic motions in the vibrational spectra of floppy systems: The LiCN molecule" F. Borondo, E. Vergini, D. A. Wisniacki, A. Zembekov and R. Benito. Journal of Chemical Physics **122** 111101 (2005) Rapid Communication.
- 19.-** "Motion of vortices implies chaos in Bohmian mechanics" D. A. Wisniacki, and E. Pujals. Europhysics Letters **71**, 159 (2005).
- 20.-** "Irreversibility with quantum trajectories" D. A. Wisniacki, F. Borondo, and R. Benito. Physical Review E **72**, 046219 (2005). Invited article 'The Virtual Journal of Nanoscale Science and Technology' 7 de November de 2005.
- 21.-** "Irreversibility and chaos in mesoscopic devices" D. A. Wisniacki, R. Benito and F. Borondo. AIP Conf. Proc. **800**, 219 (2005).
- 22.-** "Vortex interaction, chaos and quantum probabilities" D. A. Wisniacki, E. Pujals and F. Borondo. Europhysics Letters **73**, 671 (2006).
- 23.-** "Scarring of Homoclinic and Heteroclinic orbits" D. A. Wisniacki, E. Vergini, R. Benito and F. Borondo. Phys. Rev. Lett. **97** 094101 (2006).
- 24.-** "Quantum-to-classical transition in a system with a mixed classical dynamics". F. Toscano and D. A. Wisniacki. Phys. Rev. E **74**, 056208 (2006).
- 25.-** "Coherent control of interacting electrons in quantum dots via navigation in the energy spectrum", G. Murgida, D. A. Wisniacki and P. Tamborenea, Phys. Rev. Lett. **99** 036806 (2007).
- 26.-** "Vortex and chaos in the quantum fluid" D. A. Wisniacki, E. Pujals and F. Borondo. AIP Conf. Proc. **905**, 123 (2007).
- 27.-** "Quantum control using diabatic and adiabatic transitions" D. A. Wisniacki, G. Murgida and P. Tamborenea ' AIP Conf. Proc. **963**, 840 (2007)..

- 28.-** “Vortex dynamics and their interactions in quantum trajectories” , [D. A. Wisniacki, E. Pujals and F. Borondo](#), *Journal of Physics A* **40** 14354 (2007).
- 29.-** “Scarring in open systems” D. A. Wisniacki and G. Carlo, *Phys. Rev. E* **77**, 045201(R) (2008). Rapid Communications.
- 30.-** “The scar mechanism revisited” F. Borondo, D. A. Wisniacki, E. Vergini and R. Benito, *The European Physical Journal Special Topics* **165** (2008) 93-101 .
- 31.-** “Landau-Zener transitions in a semiconductor quantum dot” G. Murgida, D. A. Wisniacki and P. Tamborenea. *Journal of Modern Optics* **56**, 799 (2009).
- 32.-** “Coherent control of localization, entanglement, and state superpositions in a double quantum dot with two electrons” G. Murgida, D. A. Wisniacki and P. Tamborenea, *Phys. Rev. B* **79**, 035326 (2009).
- 33.-** “Scaling laws in the quantum to classical transition in chaotic systems” D. A. Wisniacki and F. Toscano, *Phys. Rev. E* **79**, 025203(R) (2009). Rapid Communications. Invited article 'The Virtual Journal of Nanoscale Science and Technology',
- 34.-** “Distribution of resonances in the quantum open baker map” J. M. Pedroza, G. Carlo, D. A. Wisniacki and L. Ernmann, *Phys. Rev. E* **79**, 016215 (2009).
- 35.-** “Quantum chaotic resonances from short periodic orbits” M. Novaes, J. M. Pedroza, D. A. Wisniacki G. Carlo and J. Keating, *Phys. Rev. E* **80**, 035202 (R) (2009).
- 36.-** “Loschmidt echo and the local density of states” N. Ares and D. A. Wisniacki, *Phys. Rev. E* **80**, 046216 (2009).
- 37.-** “Semiclassical description of quantum revivals” R. Vallejos, F. Toscano and D. A. Wisniacki, *Phys. Rev. E* **80**, 046218 (2009).
- 38.-** “A dynamical systems approach to Bohmian trajectories in a 2D harmonic oscillator“, F. Borondo, A. Luque, J. Villanueva and D. A. Wisniacki, *J. Phys. A: Math. Theor.* **42** 495103 (2009).
- 39.-** “Discrepancies between decoherence and the Loschmidt echo“ B. Casabone, I. García-Mata and D. A. Wisniacki. *Europhysics Letters* **9** 50009 (2010)
- 40.-** “Universal response of quantum systems with chaotic“, D. A. Wisniacki, N. Ares and E. Vergini *Phys. Rev. Lett.* **104**, 254101 (2010)
- 41.-** “Irreversibility in quantum maps with decoherence“ B. Casabone, I. García-Mata and D. A. Wisniacki. *Phil. Trans. R. Soc. A* **2011** 369, 278-290
- 42.-** “Control of chemical reactions using external electric fields: The case of the LiNC \_ LiCN isomerization” G.E. Murgida, D.A. Wisniacki, P.I. Tamborenea, F. Borondo. *Chem. Phys. Lett* **496** 356 (2010)
- 43.-** “Casimir force between integrable and chaotic pistons” E. Alvarez, F. D. Mazzitelli, A. G. Monasta and D. A. Wisniacki , *Physical Review A* **82** 052504 (2010).
- 44.-** “The elusive nature of the lyapunov regime in the Loschmidt echo” Ignacio García-Mata, Diego A. Wisniacki, *Journal of Physics A* (2011) .
- 45.-** “The Poincare–Birkhoff theorem in Quantum Mechanics”. D. A. Wisniacki, M. Saraceno, F. J. Arranz, R. Benito and F. Borondo, *Physical Review E* **84**, 026206 (2011)
- 46.-** “Semiclassical approach to fidelity amplitude” I. García-Mata, R. Vallejos and D. A. Wisniacki, *New Journal of Physics* **13** 103040 (2011).

- 47.- "Short periodic orbit approach to resonances and the fractal Weyl law". J. Pedrosa, D. A. Wisniacki, G. Carlo, M. Novaes, *Physical Review E* **85**, 036203 (2012).
- 48.- "Non Markovian quantum dynamics and classical chaos". I. García-Mata, C. Pineda and D. A. Wisniacki, *Phys. Rev. A* **86** 022114 (2012)
- 49.- "Perturbations and Chaos in quantum maps". D. Bullo and D. A. Wisniacki, *Phys. Rev. E* **86** 026206 (2012).
- 50.- "Loschmidt echo". A. Goussev, R. Jalabert, H. Pastawski and D. A. Wisniacki, *Scholarpedia* **7**, 11687 (2012).
- 51.- "Controlling open quantum systems using fast transitions". P. Poggi, F. Lombardo and D. A. Wisniacki, *Phys. Rev. A* **87** 022315 (2013).
- 52.- "Classical transients and support of open quantum maps", G. Carlo, D. A. Wisniacki, L. Ernmann, R. Benito and F. Borondo. *Phys. Rev. E* **87** 012909 (2013)
- 53.- "Sensitivity to perturbations and quantum phase transitions". D. A. Wisniacki, A. Roncaglia, *Phys. Rev. E* **87** 050902 (2013).
- 54.- "Quantum speed limit and optimal evolution time in a two-level system". P. Poggi, F. Lombardo and D. A. Wisniacki, *EPL* **104** 40005 (2013)

#### **SCIENTIFIC CONFERENCES**

1. Event: **Annual Meeting Asociación de Física Argentina**. Córdoba, 1995. Communication: "Decaimiento del pozo de Sinaí Cuántico"
2. Event: **IV LAWNP Y MEDYFINOL '95** . Bariloche, Argentina. September 1995. Communication: "Decay of finite well with oscilating walls".
3. Event: **Semestre 'Chaos and Quantization'**. Instituto Henri Poincaré. Paris, France. November 1995.
4. Event: **Reunión Anual de la Asociación de Física Argentina**. Tandil, 1996. Communication: "Decaimiento en sistemas unidimensionales".
5. Event: **MEDYFINOL '96**. S. M. De Tucumán, Argentina. 30 September- 4 October 1996. Communication: "Decay laws in one dimensional time dependent potentials".
6. Event: **V LAWNP Y MEDYFINOL '97**. Canela, Brasil. 28 September- 3 October 1997.. Communication: ""Quantum localization induced by driven evolution"".
7. Event: School "**Chaos and Quantum Mechanics: Theory and Applications**" Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brasil. July 1998. Communication: "Localized Structures Embebed in the Eigenfunction Chaotic Hamiltonian Systems".
8. Event: **School on Mesoscopic Electronics**. Brasilia, Brasil. From 20 to 24 july 1998. Communication: "Numerical study of diffusion in a chaotic quantum billiard"
9. Event: **Miniworkshop 'Caos en Mecánica Cuántica'**. Lab. TANDAR, Buenos Aires. December 1998. Communication: "Correcciones a la formula de trazas: ¿Interacción entre órbitas periódicas?"
10. Event: **Jornadas de Becarios de Investigación de la University de Buenos Aires**. Buenos Aires, Argentina. 1993,1994,1995, 1998 y 1999 .
11. Event: **Workshop Quantum dynamics in terms of phase-space distributions**. Max Planck Intitute, Dresden, Alemania. From 22 to 26 de may 2000. Communication: "Classical invariants in quantum mechanics".

12. Event: **Pan-American Advanced Institute of "Chaos, Decoherence and Quantum Entanglement"**. Ushuaia, Argentina. From 9 to 20 October 2000. Communication: "Classical invariants and the quantum-classical link" .
13. Event: **Reunión Anual de la Asociación de Física Argentina**. Rosario, 2001. Communication: "Sensibilidad a perturbaciones en billares cuánticos" .
14. Event: **Miniworkshop 'Caos en Mecánica Cuántica'**. Depto. de Física, FCEyN,UBA, Buenos Aires. December 2001.Communication: "Sensibilidad perturbaciones en billares cuánticos".
15. Event: Workshop '**Quantum Chaos: theory and applications**'. Como, Italia. From 17 to 23 June 2003. Communication: " Different Time Scales in Wave Function Intensity Statistics " .
16. Event: Reunión Anual de la Asociación de Física Argentina. Bahia Blanca, 2004. Communication.
17. Event: **Escuela de verano de la University Complutense de Madrid: Caos en sistemas Clásicos y Cuánticos'**. From 17 to 21 July 2006. Título de la charla: 'Chaos and Irreversibility'.
18. Event: **International Congress on Mathematical Physics - ICMP 2006**. Rio de Janeiro, Brasil. Communication.
19. Event: **International Conference of Computational Methods in Sciences and Engineering-Symposium "Quantum Control and Light-Matter Interactions: Recent Computational and Theoretical Results"**, From 25 to 30 September 2007. Corfu Grecia. Invited talk: 'Quantum control using diabatic and adiabatic transitions'.
20. Event: **92 Reunión Anual de la Asociación de Física Argentina**. Salta, September 2007. Communication: Control coherente de electrones interactuantes en quantum dots: Navegando por el espacio de Hilbert.
21. Event: Workshop '**Quantum Chaos: theory and applications**'. TANDAR, Buenos Aires. From 12 to 16 March 2007. Invited talk: " Quantum control using Landau-Zener transitions " .
22. Event: Workshop '**2nd. Workshop on Quantum Chaos: theory and applications 2'**. UAM, Madrid, Spain. From 12 - 15 february, 2008. Communication: " Navigating the spectrum of LiCN to control isomerization " .
23. Event: **93 Reunión Anual de la Asociación de Física Argentina**. Buenos Aires, September 2007. Communication: Control cuántico mediante transiciones diabáticas y adiabáticas.
24. Event: Workshop '**Quantum coherence and decoherence**' Benasque, Spain. From 13 to 21 September 2008.Invited talk : 'Quantum to classical transition in the kicked harmonic oscillator'.
25. Event: **XV Jornada SIMUMAT**. UAM, Madrid, Spain. 22 September 2008. Charla invitada: Control of quantum proceses in mesoscopic systems'
26. **94 Reunión Anual de la Asociación de Física Argentina**. Rosario 14-18 September 2009. Comunicaciones: "Quantum chaotic resonances from short periodic orbits", "Loschmidt echo and decoherence" y "Quantum control using diabatic and adiabatic transitions'
27. Event: **LAWNPO9**. Buzios, Brasil. From 4 to 9 October 2009 . Invited speaker. Charla invitada: "Loschmidt echo and the local density of states" . Communication: "Quantum chaotic resonances from short periodic orbits"
28. Event: **Quantum Nonstationary Systems**. Brasilia, Brasil. From 18 to 23 October 2009. Communication: "Quantum control using diabatic and adiabatic transitions'
29. Event: Workshop '**Quantum coherence and decoherence**' Benasque, Spain. From 6 to 13 de September 2010. Invited talk: ' Perturbations, Irreversibility, and Chaos: Universe Response'.
30. Event: Workshop '**4nd. Workshop on Quantum Chaos: theory and applications** '. Castro

Urdiales, Spain. From 13 - 17 September, 2010. Invited talk: 'Universal Response of Quantum Systems with Chaotic Dynamics' .

31. **95 Reunión Anual de la Asociación de Física Argentina.** Malargue. 28-30 September 2010. Invited talk: 'Perturbaciones y caos en mecánica cuántica'.

32. '**Quantum Physics with Non-hermitian Operators**', Max Planck Institute, Dresden, Germany, June 15 - 25, 2011.

33. **Event: AFA SUF'** Montevideo Uruguay . Communication and organizer Quantum information division. September, 2011.

35. '**Wave Chaos from the Micro- to the Macroscale**' International Workshop October 22 - 26, 2012, Max Planck Institute, Dresden, Alemania. Invited talk: 'Semiclassical approach to quantum fidelity' .

36. Event: Workshop '**Fidelity fluctuations and non-Markovianity**' Cuernavaca, Mexico. From June 29 to July 2013 Invited talk: 'Amplitude fidelity: from quantum maps to many body systems'.

37. Event: **School 'Applications of quantum mechanics 2013'**. Guadalajara, Mexico del 10/06 al 15/06 2013. Course 'Irreversibility and chaos in quantum mechanics'.

38. Event: Workshop '**Quantum information IV**' Paraty, Rio de Janeiro, Brasil..Del 11 al 16 de Agosto de 2013. Invited talk: 'Quantum control and quantum speed limit'.

39. **98 Reunión Anual de la Asociación de Física Argentina.** Bariloche. 25-28 September 2013. Organization Quantum information session.

#### **FELLOWSHIP:**

1.- Fellowship: **Investigación para estudiante.** August 1992 to december 1994. Institución: University de Buenos Aires.

2.- Fellowship: **Iniciación a la investigación para graduados.** December 1994 to March 1997. Institución: University de Buenos Aires.

3.- Fellowship: **Perfeccionamiento para graduados.** March 1997 to March 2000. University de Buenos Aires.

4.- Fellowship: **INTERCAMPUS para alumnos de postgrado.** Duración: May y June 1999. Institución: AECI. Place: Dpto. de Química, University Autónoma de Madrid. Madrid, Spain.

5.- Fellowship: **Postdoctoral libre.** April 2000 to March 2002. Institución: CONICET.

6.- Fellowship: **INTERCAMPUS para profesor visitante.** May y June del 2000. Institución: AECI. Lugar de Trabajo: Dpto. de Química, University Autónoma de Madrid. Madrid, Spain.

7.- Fellowship: **Programa de Cooperación Interuniversitaria para profesor visitante.** May y June del 2001. Institución: AECI. Lugar de Trabajo: Dpto. de Química, University Autónoma de Madrid. Madrid, Spain.

8.- Fellowship: **Programa de Cooperación Interuniversitaria para profesor visitante.** May y June del 2002. Institución: AECI. Place: Dpto. de Química, University Autónoma de Madrid. Madrid, Spain.

9.- Fellowship: **Ayudas a tecnólogos y doctores extranjeros (postdoctoral).** 1 de April 2003 to 1 de April de 2004. Institution: Ministerio de Educación de Spain. Place: Dpto. de Química, University Autónoma de Madrid. Madrid, Spain.

#### **10. VISITS TO OTHER SCIENTIFIC INSTITUTIONS:**

- 3 weeks May 2005. University Autónoma de Madrid. Madrid, Spain.
- 10 days UFRJ, January 2006-February 2007. Rio de Janeiro, Brasil.
- 2 weeks July 2006. University Autónoma de Madrid. Madrid, Spain.
- 2 weeks May 2007. University Autónoma de Madrid. Madrid, Spain.
- 1 week September 2008. University Autónoma de Madrid. Madrid, Spain.
- 10 days UFRJ, July 2009. Rio de Janeiro, Brasil.
- 4 weeks June/July 2010. University Politécnica de Madrid. Madrid, Spain.

### **ADVISOR OF PHD AND MASTER STUDENTS.**

**-Name:** Ernesto Rotondo, fellow ANPCyT (2007) . Title: Control Coherente y Caos en Mecánica cuántica.

**-Name:** Juan Pedroza, fellow CONICET (presentación 2007- ingreso 1/04/08) Title: ' Fenómenos de localización en sistemas cuánticos abiertos'

**-Name:** Darío Bullo, Master Thesis. 1/03/10 Title: Perturbaciones y caos en mecánica cuántica'.

**-Name:** Gustavo Murgida, fellow CONICET (presentación 2004) Tema de investigación: Dinámica cuántica de partículas interactuantes en nanoestructuras de semiconductores. Phd thesis: 11/06/2010.

**-Name:** Natalia Ares, Master Thesis defended in FCEyN UBA August 2009. Title: 'Eco de Loschmidt y la densidad local de estados'.

**-Name:** Bruno Rizzo, Master Thesis defended in FCEyN UBA April 2010. Title: Mecánica cuántica en un sistema mixto abierto'.

**-Name:** Bernardo Casabone, Master Thesis defended in FCEyN UBA May 2010. Title: Irreversibilidad y decoherencia en mapas hiperbólicos.

### **INVITED TALKS**

- CBPF, Rio de Janeiro, Brazil. October de 1997.
- University Autónoma of Madrid, Madrid, Spain. June de 1999.
- University de Cantabria, Santander, Spain. June de 1999.
- University Autónoma de Madrid, Madrid, Spain June 2002.
- University Politécnica de Madrid, Madrid, Spain. November 2003.
- University Politécnica de Madrid, Madrid, Spain. July 2005.
- CBPF, Rio de Janeiro, Brasil. 25 January 2006.
- Coloquio en el Dpto de Física, UBA. 6 April 2006.

- University Complutense de Madrid, Title: 'Chaos and Irreversibility'. 21 July 2006.
- Coloquio en el Dpto de Física, UBA. Title: " Irreversibilidad y caos en mecánica cuántica" . 6 April 2007
- TANDAR Lab, CNEA, Coloquio del Depto. De Física. November 2007. Title: " Eco de Loschmidt: Irreversibilidad y Caos en Mecánica Cuántica”.
- 'Quantum to classical transition in the kicked harmonic oscillator'. 20 September de 2008, Benasque, Spain.
- 'Control of quantum processes in mesoscopic systems', Universidad Autónoma de Madrid, Spain, 22 September 2008.
- 'Perturbations, Irreversibility, and Chaos: Universe Response'. 10 September 2010, Benasque, Spain.
- 'Universal Response of Quantum Systems with Chaotic Dynamics' 16 de September de 2010, Castro Urdiales, Spain.
- ' Perturbations and Chaos in Quantum Mechanics' en IV Encuentro Informal de Materia Condensada, March 4 2011, La Plata, Argentina.

## **OTHER**

-**Referee of** Physical Review Letters, Physical Review E, Physical Review B, Journal of Physics A, Il Nuovo Cimento B, SIGMA ([Symmetry, Integrability and Geometry: Methods and Applications](#)), [Journal of Modern Optics y Physica A](#).

-**Member of the examining committee: Phd thesis:** Ana Amador (2009), David Schneider (2007). Hernan Calvo (2010).  
**licenciatura thesis:** de Ricardo Luis Rey, April 2006. Ariel Bendersky (2006). Guido Intronati (March 2008), Gabriel Aguilar (6 de June 2008). Pablo Riera (2010). Ezequiel Rubio (2010).

## **-Scientific Meeting Organization:**

-IX Giambiagi winter school 'Physics and the computers of the future', Dpto. De Física, University de Buenos Aires del 30 de July al 7 de August de 2007.

-Workshop ´ 1<sup>st</sup> Workshop on Quantum Chaos: theory and applications´. TANDAR, Buenos Aires. Del 12 al 16 de March de 2007.

-XI Giambiagi winter school The Quantum Mechanics of the XXI Century: Manipulation of Coherent Atomic Matter Dpto. De Física, University de Buenos Aires del 27 de July al 7 de August de 2009.

-Workshop ´3<sup>th</sup> Workshop on Quantum Chaos: theory and applications´. Lab. TANDAR, Buenos Aires. Del 1 al 4 de diciembre de 2009.