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1 SCIENTIFIC ACTIVITIES

1.1 LIST OF PUBLICATIONS

1.1.1 By the Members in Benin

1. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou *Bosonization of the Schwinger Model by Noncommutative Chiral Bosons* Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), e-print arXiv: hep-th/0608024 (August 2006), pp 173-180.
2. C. Hounga, M. N. Hounkonnou and A. Ronveaux *New Families of Orthogonal Polynomials*, J. Comp. Appl. Math. **193** (2) 474-483 (2006).
3. David Lauvergnat, Ezinvi Baloïtcha, Georges Dive and Michéle Desouter-Lecomte *Dynamics of complex molecular systems with numerical kinetic energy operators in generalized coordinates*, Chem. Phys. **326** 500 (2006).
4. C. Hounga, M. N. Hounkonnou and A. Ronveaux, *Laguerre - Freud Equations for the Recurrence Coefficients of Some Discrete Semi-Classical Orthogonal Polynomials of Class Two*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 412-419.
5. A. Anjorin and M. N. Hounkonnou, *Basic Set of Polynomials: General Overview*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 338-343.
6. K. Sodoga, M. N. Hounkonnou and G. Debiais, *The Potential Group Method for Sturm - Liouville Equations*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 315-324.
7. M. K. Mahamann, *Analytical Solutions of a Generalized Nonlinear Reaction - Diffusion Equation*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 255-261.
8. G. Debiais, F. K. Guedje and M. N. Hounkonnou, *New Approach to the Characterization of the Atmosphere by Determination of Original Analytical Relations Representing a Backscattered Signal LIDAR*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 212-229.

9. L. Gouba, J. Govaerts and M. N. Hounkonnou, *Nonabelian Global Symmetries Realisation in Two Dimensional N Flavour Massless Schwinger Model* Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 230-236.
10. M. N. Hounkonnou, A. Ronveaux and K.Sodoga, *Factorization of Some Confluent Heun's Differential Equations*, Applied Mathematics and Computation (in press).
11. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou, *(p,q)-deformations and (p,q)-vector coherent states of the Jaynes-Cummings model in the rotating wave approximation*, J. Math. Phys. (in press).

1.1.2 By the Members in Africa

1. H V Mweene, *Generation of Matrices with Specified Eigenvalues*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 304-314.
2. B. R. Malonda-Boungou, B. M'Passi-Mabiala, S. Meza-Aguilar, C. Demangeat, *The magnetic map of MnNi alloy thin films on Co(001) and Co(111)*, Surface Science **600** (2006) 1763.
3. B. M'Passi-Mabiala, B.R. Malonda-Boungou, L. Mouketo and C. Demangeat, *The magnetic structure of FeMn layers across a Cu spacer*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 295-303.
4. Th. B. Bouetou, *Bol Loops as a New Approach in Physics*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 181 - 197.
5. K. V. Kuetche, T. C. Kofane and B. T. Bouetou, *The Algebraic Structure of a Generalized Coupled Dispersionless System*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 262-281.
6. D. B. Adekanmbi and T. A. Bamiduro, *The Beta-Geometric Model Applied to Fecundability in a Sample of Married Women*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 325-332.

7. F. B. Augusto and O. M. Bamigbola, *On the Existence and Uniqueness of Solutions to the Thermal Filtration Model*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 333-337.
8. U. N. Basse, *On Compact Elements of Banach Algebras*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 363-371.
9. G. Bissanga, *Applications of the Adomian Decomposition Method to Solve the Duffing Equation and Comparison with the Perturbation Method*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 372-377.
10. J. Dzoumba, D. Moukoko and Y. Nkasa, *Hermite Interpolation Polynomial of Several Real Variables*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 378-386.
11. O. A. Fadipe-Joseph, *Braid Index with Up to Ten Crossings*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 387-396.
12. K. E. Gneyou, *Hazard Rate Prediction in Life Time Data Analysis*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 397-411.
13. O. P. Layeni and A. P. Akinola, *A Study of a Viscoelastic Contact Problem*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 420-426.

1.1.3 By the Members outside Africa

1. J-P. Antoine, *David Speiser's group theory: From Stiefel's crystallographic approach to Kac-Moody algebras, in Two Cultures*, Essays in Honour of David Speiser, pp. 13-23; K. Williams (ed.); Birkhäuser, Basel, 2006.
2. J-P. Antoine and C. Trapani, *A note on Banach partial *-algebras*, Mediterranean J. Math. **3** (2006) 67-86.

3. J-P. Antoine, *Representation theory in classical and quantum physics*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 3-64.
4. J-P. Antoine, *Wavelets and wavelet frames on the 2-sphere*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp 344-362.
5. J-P. Antoine, *Partial inner product spaces with application to Gabor/Wavelet analysis Automation*, Computers, Applied Mathematics **15** (2006) 7-23.
6. G. Stenuit, S. Michotte, J. Govaerts and L. Piraux, *Vortex Matter and Temperature Dependence of the Ginzburg-Landau Phenomenological Lengths in Lead Nanowires*, Proceedings of the NATO Advanced Research Workshop, *Electron Correlation in New Materials and Nanosystems* (ECNMN-2005)", Yalta (Ukraine), 19 - 23 September 2005, NATO Science Series II: Mathematics, Physics and Chemistry, Vol. 241, eds. K. Scharnberg and S. Kruchinin (Springer, Berlin, 2007), 11 pages.
7. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou, *Bosonization of the Schwinger Model by Noncommutative Chiral Bosons*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp. 173-180.
8. L. Gouba, J. Govaerts and M. N. Hounkonnou, *Nonabelian Global Chiral Symmetry Realisation in the Two-Dimensional N Flavour Massless Schwinger Model*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp. 230-236.
9. J. Govaerts and D. Bertrand, *Superconductivity and Electric Fields: A Relativistic Extension of BCS Superconductivity*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp. 237-254.
10. F. Payen and J. Govaerts, *Topological Background Fields as Quantum Degrees of Freedom of Compactified Strings*, Modern Physics Letters A **22** (2007) 119-130.
11. K. Piechowska-Strumik, D. Lauvergnat, M.-C. Bacchus-Montabonel and M. Desouter-Lecomte, *Quantum dynamics around a non planar conical intersection in vinoxy radical relaxation*, Chem. Phys. Letters **425** (2006) 16-21.
12. David Lauvergnat, Ezinvi Baloitcha, Georges Dive and Michèle Desouter-Lecomte *Dynamics of complex molecular systems with numerical kinetic energy operators in generalized coordinates*, Chem. Phys. **326** (2006) 500-508.

13. D. Sugny, M. Ndong, D. Lauvergnat, Y. Justum and M. Desouter-Lecomte, *Laser control in open molecular systems: STIRAP and Optimum Control*, J. Photochem. Photobio. A: Chem. (to appear).
14. M. Ya. Amusia, L. V. Chernysheva, Z. Felfli and A. Z. Msezane, *Spin-Orbit Activated Intra-Doublet Coupling in Generalized Oscillator Strengths of Cs and Ba*, Bull. Am. Phys. Soc. 51, 90 (2006).
15. D. Sokolovski, S. Yu Ovchinnikov, Z. Felfli, J.H. Macek and A.Z. Msezane, *Regge Oscillations in Electron-Atom Total Scattering Cross Sections*, Bull. Am. Phys. Soc. 51, 93 (2006).
16. Zhifan Chen and Alfred Msezane, *Random-Phase Approximation with Exchange for Inner-Shell Electron Transitions II: Effects of Inter-shell Correlations*, Bull. Am. Phys. Soc. 51, 152 (2006).
17. V.R. Shaginyan, A.Z. Msezane and M. Ya. Amusia, *Collapse in Mixture of Two Component Fermi Gases*, Bull. Am. Phys. Soc. 51, 155 (2006).
18. Zhifan Chen and A. Z. Msezane, *Random Phase Approximation with Exchange for Inner-Shell Electron Transitions: Effects of Inter-Shell Correlations*, J. Phys. B 39, 4355 (2006).
19. G.P. Gupta and A.Z. Msezane, *Calculated Energy Levels and Lifetimes in Ca X*, J. Phys. B 39, At Press (2006).
20. Z. Felfli, A.Z. Msezane and D. Sokolovski, *Near-Threshold Behaviour of Electron Elastic Scattering Cross Sections for Fr: A Regge Pole Analysis*, J. Phys. B 39 Letter 353 (2006).
21. M. Ya. Amusia, L. V. Chernysheva, Z. Felfli, and A. Z. Msezane, *Generalized Oscillator Strengths for the 3d Electrons of Cs, Ba, and Xe: Effects of Spin-Orbit-Activated Interchannel Coupling*, Phys. Rev. A73, 062716 (2006).
22. Zhifan Chen and A. Z. Msezane, *Random Phase Approximation with Exchange for Inner-Shell Electron Photoionization*, Proc. Fourth International Workshop on Contemporary Problems in Mathematical Physics, November 5th-11th, 2005, Cotonou, Republic of Benin, eds. Jan Govaerts, M. Norbert Hounkonnou and Alfred Z. Msezane (World Scientific, Singapore, 2006), pp. 198.
23. A. Z. Msezane, A. C. Beye, and U. Becker, *US-Africa Advanced Studies Institute on Photon Interactions with Atoms and Molecules: Report on Materials Activities*, IUMRS Facets 5, 11 (2006).
24. F. P. Keenan, J. J. Drake, S. Chung, N. S. Brickhouse, K. M. Aggarwal, A. Z. Msezane, R. S. I. Ryans, and D. S. Bloomfield, *Soft X-ray Emission Lines of Fe XV in Solar Flare Observations and the Chandra Spectrum of Capella*, Astrophysical Journal 645, 597 (2006).
25. G. P. Gupta and A. Z. Msezane, *Oscillator Strengths and Lifetimes in Kr XXV*, Physica Scripta, 73, 556 (2006).

26. F. P. Keenan, K. M. Aggarwal, D. S. Bloomfield, A. Z. Msezane, and K. G. Widing, *An Investigation of Fe XV Emission Lines in Solar Flare Spectra*, Astronomy and Astrophysics, 449, 1203 (2006).
27. A. S. Baltenkov, U. Becker, S. T. Manson, and A. Z. Msezane, *Photoelectron Spectra of NC60 Molecule on Crystalline Si Surface*, Phys. Rev. B73, 075404 (2006).
28. V. R. Shaginyan, M. Ya. Amusia, A. Z. Msezane, and K. G. Popov *Universal Cause of High-Tc Superconductivity and Anomalous Behavior of Heavy Fermion Metals*, in New Topics in Superconductivity Research; p. xx; ed., B. P. Martins (NOVA; Publishers,2006).
29. M. Ya. Amusia, A. S. Baltenkov, L. V. Chernysheva, Z. Felfli, and A. Z. Msezane, *Modification of the Xe 4d Giant Resonance by the C60 Shell in Molecular Xe@C60*, Journal of Experimental and Theoretical Physics 102, 53 (2006).

1.2 PUBLISHED BOOKS

1. Eds Jan Govaerts, M. Norbert Hounkonnou, Alfred Z. Msezane *Proceedings of the Fourth International Workshop on Contemporary Problems in Mathematical Physics* (World Scientific Publishing, Singapore, 2006) 456 pages.

1.3 INTERNAL REPORTS AND PREPRINTS

1.3.1 By the Members in Benin

1. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou *A (p,q) -deformed Landau problem in a spherical harmonic well: spectrum and noncommuting coordinates*, ICMPA-MPA/2006/20; CP3-06-12; (Preprint ICMPA, Preprint CP3, 2006); e-print arXiv:hep-th/0609120 submitted to Mod. Phys. Lett. A
2. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou *(p,q) -deformations and (p,q) -vector coherent states of the Jaynes-Cummings model in the rotating wave approximation*, ICMPA-MPA/2006/21; CP3-06-13; (Preprint ICMPA, Preprint CP3, 2006); e-print arXiv:quant-ph/0610192, to appear in J. Math. Phys.
3. J. Ben Geloun and M. N Hounkonnou *Bosonic quansideterminant and eigenvalue problem for generalized Jaynes-Cummings operator*, ICMPA-MPA/06/36; (Preprint ICMPA, 2006)
4. J. Ben Geloun and M. N Hounkonnou *A generalized Landau operator: spectrum, dynamical deformed symmetry, noncommuting coordinates*, ICMPA-MPA/2006/40; (Preprint ICMPA, 2006)
5. M. N. Hounkonnou and E. B. Ngompe Nkouankam *Generalized Heisenberg algebra: application to the harmonic oscillator*, ICMPA-MPA/2006/24 (Preprint ICMPA 2006)
6. M. N. Hounkonnou and E. B. Ngompe Nkouankam *Von Neumann quantization of the Landau operator on a disc: scattering, spectral and resonance properties*, ICMPA-MPA/2006/41, (Preprint ICMPA 2006)

7. M. N. Hounkonnou and E. B. Ngompe Nkouankam *Friedrichs quantization of the Landau operator on a disc: scattering, spectral and resonance properties*, ICMPA-MPA/2006/44, (Preprint ICMPA 2006)
8. M. N. Hounkonnou and M. M. Kabir *Lie group symmetry reduction of a Boussinesq system: classification of the invariance subalgebras and exact solutions*, ICMPA-MPA/2006/21, (Preprint ICMPA 2006)
9. M. N. Hounkonnou and M. M. Kabir *Nonlocal symmetry reduction and exact solutions of a Boussinesq system*, ICMPA MPA/2006/42, (Preprint ICMPA 2006)
10. M. N. Hounkonnou and M. M. Kabir *Diffusion equation modelling brain cancer treatment: Lie and direct reductions*, ICMPA MPA/2006/43, (Preprint ICMPA 2006)
11. A. Anjorin, M. N. Hounkonnou and A Ronveaux *Some properties of solutions to Confluent, Doubleconfluent, Bicon.uent and Triconfluent Heuns differential equations*, ICMPA MPA/2006/43 (Preprint ICMPA 2006)
12. Ezinvi Baloïtcha and Michèle Desouter-Lecomte *A hybrid quantum/classical molecular dynamics approach: Application to proton transfer in a dissipative bath*, ICMPA/2006/47 (Preprint ICMPA 2006)
13. A. Anjorin, M. N. Hounkonnou *Factorization of confluent, doubleconfluent, biconfluent and triconfluent Heun's differential operators and associated solvable potentials*, ICMPA MPA/2006/46 (Preprint ICMPA 2006)

1.3.2 By the Members in Africa

1. B.R. Malonda-Boungou, B. M'Passi-Mabiala, S. Meza-Aguilar, C. Demangeat, *The magnetic map of MnNi alloy thin films on Co(001) and Co(111)*, ICTP preprint, IC/2005/022.
2. B. M'Passi-Mabiala, B.R. Malonda-Boungou, L. Mouketo and C. Demangeat, *The magnetic structure of FeMn layers across Cu spacer in the (001) and (111) crystallographic faces*, ICTP preprint, in press.

1.3.3 By the Members outside Africa

1. J-P. Antoine, C. Trapani and F. Tschinke, *Biweights and *-homomorphisms of partial *-algebras*, Int. J. Math. and Math. Sci., (to appear)
2. L. Jacques and J-P. Antoine, *Multiselective pyramidal decompositions of images: wavelets with adaptive angular selectivity*, Int. J. Wavelets, Multires. and Inform. Proc. (to appear)
3. J-P. Antoine, C. Trapani and F. Tschinke, *Continuous *-homomorphisms of Banach partial *-algebras*, *Mediterranean J. Math.* (to appear)
4. J-P. Antoine and P. Vandergheynst, *Wavelets on the two-sphere and other conic sections*, *J. of Fourier Analysis and Appl.* 13 (to appear)

5. P. Balazs and J-P. Antoine, *Weighted and controlled frames*, Applied Comput. Harmon. Anal. (2007) (submitted)
6. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou, *A (p,q) -Deformed Landau Problem in a Spherical Harmonic Well: Spectrum and Noncommuting Coordinates*, preprint ICMPA-MAP/2006/22, CP3-06-12, e-print arXiv:hep-th/0609120, submitted for publication in Modern Physics Letters A
7. J. Ben Geloun, J. Govaerts and M. N. Hounkonnou, *(p,q) -Deformations and (p,q) -Vector Coherent States of the Jaynes-Cummings Model in the Rotating Wave Approximation*, preprint ICMP-MAP/2006/20, CP3-06-13, e-print arXiv:quant-ph/0610192, submitted for publication in the Journal of Mathematical Physics.
8. D. Lauvergnat, S. Blasco, X. Chapuisat and A. Nauts, *A simple and efficient evolution operator of time-dependant Hamiltonian: the Taylor expansion*, J. Chem. Phys. (Submitted).
9. Zhifan Chen and A. Z. Msezane, *Random Phase Approximation with Exchange for Inner-Shell Electron Transitions II*, Phys. Rev. A (Submitted, 2006).
10. D. Sokolovski, Z. Felfli, S.Yu. Ovchinnikov, J.H. Macek and A.Z. Msezane, *Regge Oscillations in Electron-Atom Elastic Cross-Sections?*, Phys. Rev. A, (Submitted, 2006)

1.4 INVITED LECTURES

1.4.1 By Members in Benin

1. M. N. Hounkonnou, Université de Perpignan (France), Juillet 2006,
Sturm-Liouville operator: supersymmetric factorization, solvable potentials and underlying algebraic structures
2. M. N. Hounkonnou, Université de Lomé (Togo), 5 novembre au 11 novembre 2006,
Invited Lectures: Group theory and representations

1.4.2 By the Members outside Africa

1. J-P. Antoine, Université de Provence, LATP, CMI, Marseille, Jan. 12th, 2006 *Ondelettes et repères d'ondelettes sur la sphère* .
2. J-P. Antoine, Université de Kinshasa, RDC, Fev. 6th to 17th, 2006, cours (30h) : *Theorie quantique des champs*.
3. J-P. Antoine, Fukuoka Un iv., Dept of Applied Mathematics (Japan), March 20th, 2006 : *Banach partial *-algebras : a review*
4. J-P. Antoine, E. Schrödinger Institute, Vienna, December 20th, 2006 *Partial inner product spaces with application to Gabor/wavelet analysis*

5. J-P. Antoine, Austrian Acad. Sciences, Acoustical Institute, Vienna, December 27th, 2006, *Wavelet analysis, from the line to the two-sphere*.
6. J. Govaerts,
Sur la Route vers le Modèle Standard des Interactions Fondamentales: En Guise de Boussole pour Encore Deux Années d'Explorations Quantiques et Relativistes, General Public Lecture, Brussels, Saturday, May 6th, 2006.
7. J. Govaerts,
Department of Theoretical Physics, School of Physics University of New South Wales (UNSW), Sydney (Australia)
Invited Lectures: Quantisation, Topology and Interactions , September 1st - November 24th, 2006
8. D. Lauvergnat,
Spectroscopie de molécules déformables : Apport des méthodes ab-initio, Journées de Spectroscopie Moléculaire -JSM 2006, 3-5 juillet 2006 Lyon.
9. D. Lauvergnat, *LaCoPhoDyn : Laser Control of Photoinduced Dynamics*, Laser Control of Photoinduced Dynamics, 27-28 juin 2006 Dijon.
10. D. Lauvergnat, *Dynamique quantique : modélisation des phénomènes dépendants du temps*, Journées Modélisation de l'ENS-ENSCP, 6-7 juin 2006 Paris.

1.5 SEMINARS GIVEN

1.5.1 By Members in Benin

1. M. N. Hounkonnou, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminars code 16, Jan. 2006, *Noncommutativity in Physics*
2. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminars code 10, Jan. 2006, *Quasideterminants: a new approach for eigenvalue problems*
3. M. N. Hounkonnou, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 16, Fev. 2006, *Basic properties of non commutative orthogonal polynomials*
4. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 11, Fev. 2006, *Noncommutative orthogonal polynomials*
5. M. K. Mahaman, Seminar of PDE, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminars code 12, Fev. 2006, *A first look at group analysis of differential equations*

6. F. Massamba Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 15, Mar. 2006, *2-Dimensional Noncommutative Field Theory on the Light Cone*
7. E Baloïtcha, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 14, Apr. 2006, *Hybrid quantum/classical molecular dynamics for a proton transfer reaction coupled to a dissipative bath* (Hammes-Shiffer et al. JCP 124, 2244102(2006))
8. M. N. Hounkonnou Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 16, Apr. 2006, *Factorization of Some Confluent Heun's Differential Equations*
9. A. Anjorin Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, Apr. 2006, *Some properties of solutions to confluent Heun's differential equations (Part I)*
10. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, Apr. 2006, *The Landau operator (part I): a q -deformed model*
11. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, Apr. 2006, *Some properties of solutions to confluent Heun's differential equations (Part II)*
12. M. K. Mahaman, Seminar of PDE, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminars code 12, May. 2006, *Group analysis of differential equations: Application to a Boussinesq system*
13. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, May. 2006, *The Landau operator (part II): a (p,q) -deformed model*
14. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, May. 2006, *Some properties of solutions to confluent Heun's differential equations (Part III)*
15. E Baloïtcha Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 14, Jun. 2006, *Dynamics of complex molecular systems with numerical kinetic energy operators in generalized coordinates*

16. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, Jun. 2006, *Heun's equation reduction to hypergeometric form*
17. M. K. Mahaman, Seminar of PDE, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminars code 12, Jun 2006, *Nonlocal symmetry of a Boussinesq system*
18. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, Jul. 2006, *Jaynes-Cummings Model (part I): q -deformations and solvable models*
19. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, Jul. 2006, *Biconfluent Heun's equation reduction to hypergeometric form*
20. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, Jul. 2006, *Jaynes-Cummings Model (part II): (p, q) -deformations and solvable models*
21. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, Sept. 2006, *Quasideterminants and spin-orbit interactions models*
22. M. N. Hounkonnou, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 16, Sept. 2006, *On (p, q) deformations of the Heisenberg algebra*
23. E. B. Ngompe Nkouankam, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 13, Sept. 2006, *Generalization of the Heisenberg algebra: application to the harmonic oscillator*
24. M. K. Mahaman, Seminar of PDE, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminars code 12, Oct. 2006, *Classical and nonclassical symmetries of a model of brain cancer treatment*
25. M. N. Hounkonnou, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 16, Oct. 2006, *Von Neumann self-adjoint extensions of linear symmetric operators in Hilbert spaces*

26. E. B. Ngompe Nkouankam, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 13, Oct. 2006, *Von Neumann quantization of Landau operator on a disc: scattering, spectral and resonance properties* .
27. A. Anjorin, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 11, Nov. 2006, *Factorization of confluent, doubleconfluent, biconfluent and triconfluent Heun's differential operators and associated solvable potentials*
28. M. K. Mahaman, Seminar of PDE, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminars code 12, Nov. 2006, *Group classification of a model of brain cancer treatment*
29. M. N. Hounkonnou, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 16, Dec. 2006, *Friedrichs extension of linear operators in Hilbert spaces*
30. E. B. Ngompe Nkouankam, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 13, Dec. 2006, *Friedrichs quantization of Landau operator on a disc: scattering, spectral and resonance properties*
31. J. Ben Geloun, Seminar of Mathematical Physics, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 10, Dec. 2006, *A generalized Landau operator: deformed symmetries and noncommuting coordinates*
32. M. N. Hounkonnou, Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 16, Dec. 2006, *On supersymmetric Sturm-Liouville problem*

1.5.2 By the Members in Africa

1. U. N. Basse (Ibadan University, Nigeria), Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 05, Jun. 2006, *Numerical range theory for compact elements of locally convex inductive limit (*-) algebras (Part I)*
2. U. N. Basse (Ibadan University, Nigeria), Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMIPA Seminar code 05, Nov. 2006, *Numerical range theory for compact elements of locally convex inductive limit (*-) algebras (part II)*

3. K. Kangni (University of Cocody, Ivory Cost), Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 06, Nov. 2006, *On Harmonic analysis (Part II)*
4. K. Kangni (University of Cocody, Ivory Cost), Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 06, Nov. 2006, *Representation theory and harmonic analysis (Part I)*
5. K. Kangni (University of Cocody, Ivory Cost), Seminar of Functional Analysis and Operator Theory, 1st Seminar Room of the International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 06, Dec. 2006, *Representation theory and harmonic analysis (Part II)*
6. U. N. Bassey (Ibadan University, Nigeria), Seminar of Functional Analysis and Operator Theory, 1st Seminar d'Abomey-Calavi, ICMPA Seminar code 05, Dec. 2006, *Lamé operator and transformed variants*

1.5.3 By the Members outside Africa

1. J. Govaerts,
Center for Particle Physics and Phenomenology, Catholic University of Louvain, Louvain-la-Neuve (Belgium), July 12th, 2006
A Deformation of Quantum Mechanics through the Coherent State Path Integral
2. J. Govaerts,
Department of Physics, Norwegian University of Science and Technology (NTNU) Trondheim (Norway), August 21st , 2006
A Deformation of Quantum Mechanics through the Coherent State Path Integral
3. J. Govaerts,
Department of Theoretical Physics, School of Physics, The University of New South Wales (UNSW), Sydney (Australia), September 26th, 2006
Superconductivity and Electric Fields: A Relativistic Extension to BCS Superconductivity
4. J. Govaerts,
The Theoretical Physics Institute, School of Mathematics and Physics University of Tasmania, Hobart (Australia) *Superconductivity and Electric Fields: A Relativistic Extension to BCS Superconductivity* December 4th, 2006
5. S. T. Ali,
Seminar of Mathematical Physics,
International Chair in Mathematical Physics and Applications, University of Abomey-Calavi, December 11th - December 16th, 2006,
Lectures on Quantization Techniques: Mathematical and Physical Aspects

6. S. T. Ali,
Seminar of Mathematical Physics,
Institut de Mathématiques et de Sciences Physiques (IMSP), December 20th, 2006,
Vector coherent states: a quick overview
7. S. T. Ali,
Seminar of Mathematical Physics,
Institut de Mathématiques et de Sciences Physiques (IMSP), December 21st, 2006,
On time dependent orthogonal polynomials
8. Jean-Pierre Antoine,
Université de Provence, LATP, CMI, Marseille, January 12th, 2006
Ondelettes et repères d'ondelettes sur la sphère
9. Jean-Pierre Antoine,
Université de Kinshasa, RDC, February 6th - February 17th, 2006
Lecture on quantum theory field (30h)
10. Jean-Pierre Antoine,
E.Schrödinger Institute, Vienna, November 20th, 2006
Partial inner product spaces with application to Gabor/wavelet analysis
11. Jean-Pierre Antoine,
Austrian Acad. Sciences, Acoustical Institute, Vienna, November 27th, 2006,
Wavelet analysis, from the line to the two-sphere
12. Jean-Pierre Antoine,
Fukuoka University, Dept of Applied Mathematics (Japan), March 20th, 2006,
*Banach partial *-algebras : a review*
13. Elisabeth Moyer (Harvard University, USA), Seminar of Functional Analysis and Operator Theory, 1st Room of Seminar of International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 07, Mar. 2006,
Environmental Science (Part I): The global climate change
14. Elisabeth Moyer (Harvard University, USA), Seminar of Functional Analysis and Operator Theory, 1st Room of Seminar of International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 08, Mar. 2006,
Environmental Science (Part II): Mathematical model for a reasonable representation of current climate
15. Elisabeth Moyer (Harvard University, USA), Seminar of Functional Analysis and Operator Theory, 1st Room of Seminar of International Chair in Mathematical Physics and Applications, Université d'Abomey-Calavi, ICMPA Seminar code 08(bis), Mar. 2006,
Environmental Science (Part III): A model for the current state of Atmosphere
16. D. Lauvergnat and A. Nauts, *Expression en développement de Taylor de l'opérateur évolution pour un Hamiltonien dépendant du temps. Application : interaction d'une*

impulsion laser avec le fluoroproprène.

Laboratoire de Structure et Dynamique des Systèmes Moléculaires et Solides, 6 Juillet 2006, Montpellier.

17. D. Lauvergnat *Spectroscopie de molécules déformables : Apport des méthodes ab-initio*, Laboratoire Analyse et Modélisation pour la Biologie et l'Environnement, 26 janvier 2006, Evry.

1.6 PARTICIPATION TO INTERNATIONAL CONFERENCES AND WORKSHOPS

1.6.1 By the Members in Africa

1. H V Mweene,
The Schroedinger Cat Paradox and Wave Function Reduction: a Proposed Resolution,
The International Conference on the Theoretical and Experimental Foundations of Quantum Technologies, Durban, South Africa July 10th - 14th, 2006
2. B. R. Malonda
2nd COPROMAPH International School: *Quantization Techniques: Mathematical and Physical Aspect*; Cotonou, December 11th - December 16th, 2006; Rep. of Benin

1.6.2 By the Members outside Africa

1. Jean-Pierre Antoine,
Recent Progress in Wavelet Analysis and Frame Theory, Univ. Bremen (D), January 23th - January 26th, 2006 :
Wavelets and wavelet frames on the 2-sphere
2. Jean-Pierre Antoine,
Tenth International Conference on Applied Mathematics and Computer Science (Th. Angheluta Seminar), Cluj-Napoca/Baisoara (Romania), May 30th, June 02th, 2006
Partial inner product spaces with application to Gabor/wavelet analysis
3. Jean-Pierre Antoine,
WavE2006, Bernoulli Center, EPFL, Lausanne (Suisse), July 10th-14th, 2006,
*Partial inner product spaces with application to Gabor/wavelet analysis ,
The continuous wavelet transform on conic sections*
4. Jean-Pierre Antoine,
Multiscale Methods, Sparse Decompositions and Parsimonious Statistics (HASSIP 06), GSF-IBB, Neuherberg Munich, 11th-14th, 2006,
The continuous wavelet transform on the 2-sphere and related manifolds
5. Lauvergnat D. and K. Sodoga, *Propagation of moving multidimensional polynomial functions weighted by a Gaussian envelope*,
The 19th International Conference on High Resolution Molecular Spectroscopy. August 29th - September 11th, 2006; Prague/Rep. Tchèque.

1.7 PH.D. THESES SUPERVISED AND DEFENDED 2006

1.7.1 By the Members in Benin

- M.N. Hounkonnou:

1. B. E. Ngompe Nkouankam ,
von Neumann and Friedrichs quantization of magnetic operators: scattering, spectral and resonance properties ,
Université d'Abomey-Calavi.
2. E. S. Azatassou,
Sturm-Liouville Operators and $D_{q,\omega}$ Semi-classical Orthogonal Polynomials,
Université d'Abomey-Calavi.
3. J. Ben Geloun (with J. Govaerts, co-supervisor),
Modèle de Schwinger dans un espace-temps 1+1 non Commutatif,
Université d'Abomey-Calavi.
4. A. Anjorin,
Heun differential operators: symmetry properties, factorization, solvable potentials and underlying algebraic structures,
Université d'Abomey-Calavi.
5. F. Guédjé (with G. Débiais, co-supervisor),
On Optical Parameter Determination of the Atmosphere from a LIDAR Signal,
Université d'Abomey-Calavi and Université de Perpignan.
6. M. M. Kabir,
Contribution à la Modélisation du Cancer du Cerveau,
Université d'Abomey-Calavi.

- A. Afouda:

1. E. A. Lawin,
Invariance spatio-temporelle des précipitations de la haute vallée de l'Ouémé au Bénin

1.7.2 By the Members outside Africa

- S. T. Ali:

1. G. Honnouvo,
On Discrete Wavelets: Theory and Applications,
Concordia University.
2. Tamara Diaz Chang (with V. Hussin, co-supervisor), *Coherent States from the Jaynes Cummings Model*, Université de Montréal.

- J-P. Antoine:

1. Samuel GISSOT,
Analyse du Mouvement dans les Séquences d'Images EUV de la Couronne Solaire.

2. Samira BISKRI (UST H.Boumedi(r), Alger),
Techniques d'Analyse en Ondelettes et Applications en Géophysique.
 3. Eddy-Evian NTIRWIHISHA (U. du Burundi),
Analyse en Ondelettes et Applications à la Séismologie.
- J. Govaerts:
 1. Florian Payen,
Dynamique non perturbative et topologie en électrodynamique quantique à 2+1 et 3+1 dimensions,
Université catholique de Louvain (Louvain-la-Neuve, Belgium).
 2. Bruno Bertrand,
Topologie et dynamique non perturbative en Théories de Maxwell-Chern-Simons supersymétriques à 2+1 dimensions,
Université catholique de Louvain (Louvain-la-Neuve, Belgium).
 3. Joseph Ben Geloun (with M.N. Hounkonnou, co-supervisor),
Modèle de Schwinger dans un espace-temps de dimension 1+1 non commutatif,
Université d'Abomey-Calavi.

1.8 AUTHORS' AFFILIATION

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1.9 VISITING SCIENTISTS FROM ABROAD

1. Dr H. P. Thamm, (Bonn Chuvienky University; Germany).
2. Prof. S. T. Ali, (Concordia University, Montreal, Canada).
3. Prof. V. Rivasseau, (Université Paris Sud XI, Orsay, France)
4. Prof. K. Tchakpélé, (Université de Lomé, Togo).
5. Prof. T. Assih, (Université de Lomé, Togo).

6. Prof. K. Napo, (Université de Lomé, Togo).
7. Prof. M. Lobelle, (catholic University of Louvain, Belgium)
8. Prof. K. Kangni, (University of Cocody, Ivory Cost).
9. Dr Unanaowo Nyong Bassey (University of Ibadan,Ibadan, Nigeria)
10. Mr Amou Komi Apélété (PhD student, university of Lome, Togo)
11. Mr Kokou Mensah (PhD student, university of Lome, Togo)
12. Miss Maleka Koubemba Edwige Josette (PhD student, University Cheikh Anta Diop Dakar Senegal)
13. Mr Foutse Momo (PhD student, University of Yaounde1, Cameroon)
14. Mr Kana Zeumo vivien (PhD student, Universty of Ouagadougou)
15. Dr Liz Moyer (Harvard University, USA)

1.10 NEW COLLABORATIONS

Plans were discussed regarding the creation of a multi-university doctoral and master's programme, which would ultimately involve the universities of Abomey-Calavi, Lomé, Cocody, Ibadan, Rwanda, Paris-7, Paris-XI, Louvain-la-Neuve and Concordia University. The idea is to set up a mechanism for joint supervision of theses and some faculty exchange. This would lead to the creation of a region-wide network of excellence, based in ICMPA, Cotonou (Benin).

2 ICMPA PROGRAMMES

2.1 ICMPA GRANT PROGRAMME FOR UNDERGRADUATE STUDENTS 2006

This programme intends to help the best undergraduate students with limited means and who need assistance to pursue their studies in African Universities. For 2006, this programme has permitted to support 6 students of the Université d'Abomey-Calavi for which the grants have been renewed. So, the 2006 fellows are:

1. Alia Didier Yelognissé (Benin);
2. Anago E. K. Romual (Benin);
3. Faton Elfried Grita Fifa (Benin);
4. Godonou S. Parfait (Benin);
5. Koto N'Gobi Gabien (Benin).

The ICMPA Grant Programme for Undergraduate Students (The ICMPA-GPUS) is currently sponsored by Professor Odon Vallet Foundation (France).

2.2 ICMPA RESEARCH FELLOWSHIPS 2006

In 2006, PhD fellowships granted by the International Abdus Salam Centre for Theoretical Physics (ICTP) under the contract ref: Prj-15, for a maximum of three years, have been renewed for four ICMPA PhD students. The beneficiaries PhD students are the following:

1. Ben Geloun Joseph (from Senegal);
2. Mahaman Kabir Mahaman (from Niger);
3. Anjorin Aderibigbe (from Nigeria);
4. Ngompe Nkouankam Elvis (from Cameroon).

Besides, postdoctoral fellows have been also renewed for young PhD selected in 2005, supported by ICTP under the same contract for two years plus one. The beneficiaries are the following:

1. Dr Baloïtcha Ezinvi (from Benin);
2. Dr Massamba Fortuné (from Congo-Brazzaville).

Note that, Dr Massamba, who succeeded in obtaining a permanent position in the University of Bostwana, left his postdoctoral position in April to join his new job. Consequently, the ICMPA administration took this opportunity to allocate the remaining funds from Dr Massamba postdoctoral position to partially support the stay fees of visiting Professors from Ivory Cost (Professor K. Kangni for four months) and Nigeria (Professor U. N. Bassey for four months). A part of their stay fees as well as facilities for ICMPA PhD training programmes and postdoctoral research positions have been supported by the Daniel Iagolnitzer Foundation.

Finally, limited actions, have been developed in benefit of Ph.D students of the Institut de Mathématiques et de Sciences Physiques and local researchers from University of Abomey-Calavi. These actions have mainly consisted in providing computer facilities, technical support and registration fees to the second COPROMAPH International School.

2.3 SCHOOLS AND WORKSHOPS

The Second COPROMAPH International School (December 11th - December 16th, 2006) has been sponsored by the following institutions:

1. IHES-Schlumberger Foundation Program (France);
2. The UNESCO-US State Department through the International Basic Science Programme (IBSP) under the Contract No: 450003866;
3. Local sponsors, the ICMPA and Benin Government (they provided technical support for participant transportation, and partial living costs).