

# CURRICULUM VITAE

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## EXPERIENCES PROFESSIONNELLES

**2011-2018** Maître de Conférences à la Faculté des Sciences de l'Université d'Antananarivo.

**2000-2018** Chercheur au Département de Physique à l'Université d'Antananarivo

**2012-2018** Membre du syndicat SECES section Antananarivo.

## DIPLOME , TITRE ET FORMATIONS

**2019** Docteur HDR en Physique à l'Université d'Antananarivo, Madagascar.

**2011** Training on the International Information System (INIS) training, Vienna (Austria)

**2010** Advanced Training course for developers of Information and Communication Training materials (ICT), Cairo (Egypte)

**2008** Docteur en Physique (spécialité Physique Théorique et Physique des Particules) à l'Université d'Antananarivo Madagascar.

**2007** Training on scientific publication SIST – 2007 at the University of Antananarivo Madagascar.

**2006 - 2007** Training on Artificial Neural Networks and Artificial Intelligence (ISPM Madagascar).

**2000 - 2002** D.E.A en Physique à l'Université d'Antananarivo Madagascar.

**1994 - 1999** Maîtrise de Recherche en Physique à l'Université d'Antananarivo Madagascar.

## PUBLICATIONS ET COMMUNICATIONS

**2013** Study on a Phase Space Representation of Quantum Theory, Tokiniaina Ranaivoson, Raoelina Andriambololona, **Rakotoson Hanitriarivo**, Roland Raboanary, International Journal of Latest Research in Science and Technology, ISSN (Online):2278-5299, Volume 2,Issue 2 :Page No.26-35 , March - April (2013)

**2013** Contribution to the study of Interacting Field: Case of the Standard Model, Raoelina Andriambololona, **Rakotoson Hanitriarivo**, Tokiniana Ranaivoson, Académie Malgache, April 2013

**2013** Time-frequency analysis and harmonic Gaussian functions, Tokiniaina Ranaivoson, Raoelina Andriambololona, **Rakotoson Hanitriarivo**, Pure and Applied Mathematics Journal. Vol. 2, No. 2, 2013, pp. 71-78. doi: 10.11648/j.pamj.20130202.14

**2013** Two definitions of fractional derivatives of power functions, Raoelina Andriambololona, Tokiniaina Ranaivoson, **Rakotoson Hanitriarivo**, Raboanary Roland, Pure and Applied Mathematics Journal. Vol. 2, No. 1, 2013, pp. 10-19

**2014** Derivation of equations for scalar and fermion fields using properties of dispersion-codispersion

operators. Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, **Hanitriarivo Rakotoson**, Victor Harison, International Journal of Latest Research in Science and Technology Volume 3, Issue1 : Page No. 48-52, January-February 2014 ;

**2015** Linear canonical transformation in the framework of a phase space representation of quantum mechanics. Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, **Rakotoson Hanitriarivo**, Wilfrid Chrysante Solofoarisina, International Journal of Applied Mathematics and Theoretical Physics ; Vol. 1, No. 1, 2015, pp. 1-8. doi : 10.11648/j.ijamtp.20150101.11 ; (April 2015) ;

**2016** RAOELINA ANDRIAMBOLOLONA, Ravo Tokiniaina Ranaivoson, **Hanitriarivo Rakotoson** :“ Numeral System Change in Arithmetic and Matricial Formalism “,Pure and Applied Mathematics Journal. Vol. 5, No. 3, 2016, pp. 87-92. doi : 10.11648/j.pamj.20160503.15 .

**2016 Hanitriarivo Rakotoson**, Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, Roland Raboanary, Study on representation of linear canonical transformation in quantum mechanics, HEPMad 16, Académie National des Arts, des Lettres et des Sciences Tsimbazaza (Octobre 2016).

**2017** RAOELINA ANDRIAMBOLOLONA, Ravo Tokiniaina Ranaivoson, Hasimbola Damo Emile , **Hanitriarivo Rakotoson**, “Dispersion Operators Algebra and Linear Canonical Transformations”, International Journal of Theoretical Physics,ISSN 0020-7748, Vol. 52, No. 9, doi:10.1007/s10773-016-3268-4.Published online : (February 2017).

**2018** Properties of Elementary Fermions of the Standard Model deduced from Linear Canonical Transformations, Ravo Tokiniaina Ranaivoson, Raoelina Andriambololona, **Hanitriarivo Rakotoson**, arXiv:1806.07228 [physics.gen-ph]

**2018** Gaussian-like functions as test functions in Operator Valued Distribution formulation of Complex Scalar Quantum Field Theory, Hasimbola Damo Emile Randriamisy, Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, **Hanitriarivo Rakotoson**, Roland Raboanary, arXiv:1808.00797 [quant-ph]

**2018** Ravo Tokiniaina Ranaivoson, Raoelina Andriambololona, Hery Andrianaina, **Rakotoson Hanitriarivo**, La Théorie de la fonctionnelle de la densité et ses applications en Nanotechnologie, Premier colloque internationale sur la Nanotechnologie, Avril 2018.

**2018 Hanitriarivo Rakotoson**, Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, Roland Raboanary , Linear Canonical Transformation in Relativistic Quantum Physics, arXiv:1804.10053 [quant-ph], Avril 2018

**2018** Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, **Rakotoson Hanitriarivo**, Hery Andrianaina, Mecanique Quantique et Nanotechnologie, Académie National des Arts, des Lettres et des Sciences, Tsimbazaza, Mai 2018.

**2018** Representation of the Dispersion Operators Algebra, **Hanitriarivo Rakotoson**, Raoelina Andriambololona, Ravo Tokiniaina Ranaivoson, Roland Raboanary, HEPMAD 18.

**2018** Fermions states and phase space representation of quantum theory, Ravo Tokiniaina Ranaivoson, Raoelina Andriambololona, **Hanitriarivo Rakotoson**, Roland Raboanary, HEPMAD 18.

## AUTRES

**2018** Formation en nanotechnologie offert par les spécialistes du MINATEC Grenoble.

**2018** Formation en fabrication numérique offert par MISA (Maîtrise en Informatique et Statistique Appliquée) de l’Université d’Antananarivo Madagascar.

## SPORTS ET LOISIRS

Footing, Tourisme, Jeu d’échec.