

Publications de Semay Claude

2020

Article/Dans un journal avec peer-review

- Semay Claude, Cimino Lorenzo, Willemyns Cintia, "Envelope Theory for Systems with Different Particles" in *Few-Body Systems*, 61, 19 (2020)
- Buisseret Fabien, Semay Claude, "Meson spectrum in SU(N) gauge theories with quarks in higher representations: A check of Casimir scaling hypothesis" in *Results in Physics*, 17, 103057 (2020)

Colloque/Article dans les actes avec comité de lecture

- Semay Claude, Sicorello Guillaume, "A Simple Tool to Study Many-Body Forces" in "The 22nd International Conference on Few-Body Problems in Physics (FB22)", 815-819, Caen, France (2020)

Divers/Notes de cours

- Semay Claude, "Suppléments au cours de mécanique quantique" (2020)

2019

Article/Dans un journal avec peer-review

- Semay Claude, Cimino Lorenzo, "Tests of the Envelope Theory in One Dimension" in *Few-Body Systems*, 60, 64 (2019)
- Semay Claude, Willemyns Cintia, "Equivalent period for a stationary quantum system" in *Results in Physics*, 14, 102476 (2019)
- Semay Claude, "Quantum support to BoHua Sun's conjecture" in *Results in Physics*, 13, 102167 (2019)

Divers/Notes de cours

- Semay Claude, "Mécanique quantique B" (2019)

Livre/Chapitre ou partie

- Lo Bue Francesco, Semay Claude, "A la conquête de l'expérience de Fizeau" in "L'expérience de Fizeau", UMONS (Université de Mons), 978-2-87325-115-4 (2019)

Vulgarisation/Autres media

- Stassart Camille, Semay Claude, "Le génie d'Einstein transpire dans votre GPS", *Daily Science* (2019)

2018

Article/Dans un journal avec peer-review

- Semay Claude, Sicorello Guillaume, "Many-body forces with the envelope theory" in *Few-Body Systems*, 59, 119 (2018)

- Semay Claude, "Three theorems of quantum mechanics and their classical counterparts" in European Journal of Physics, 39, 055401 (2018)
- Semay Claude, Lo Bue Francesco, Melin Soizic, Michel Francis, Bauvois Camille, "c at the belfry" in Physics Education, 53, 035015 (2018)

Colloque/Présentation - communication orale

- Sicorello Guillaume, Semay Claude, "A simple tool to study many-body forces" in "The 22nd International Conference on Few-Body Problems in Physics" , Caen, France (2018)

Divers/Notes de cours

- Semay Claude, "Mécanique quantique A" (2018)

2017

Article/Dans un journal avec peer-review

- Semay Claude, "ASTRONEFS DE SCIENTIFIQUES ET D'ÉCRIVAINS : QUI A INSPIRÉ QUI ?" in Cahiers Internationaux de Symbolisme, 146-147-148, 229-241 (2017)
- Semay Claude, Buisseret Fabien, "Bound Cyclic Systems with the Envelope Theory" in Few-Body Systems, 58, 1-7, 151 (2017)

Colloque/Article dans les actes avec comité de lecture

- Semay Claude, "La porcelaine du multivers" in "Le briquet du Tout-Puissant a-t-il allumé le Big Bang ?" , 105-137, Bruxelles, Belgique (2017)
- Semay Claude, "Boson star with particle size effects" in "Proceedings of the Workshop in honour of the 65th birthday of Professor Philippe Spindel" , 274-282, Mons, Belgique (2017)

2016

Article/Dans un journal avec peer-review

- Semay Claude, Ducobu Ludovic, "Quantum and classical probability distributions for arbitrary Hamiltonians" in European Journal of Physics, 37, 045403 (2016)

Article/Dans un journal sans peer-review

- Semay Claude, "Moi, l'univers, Dieu et tout le reste" in Athée (L') : Revue de l'Association Belge des Athees, 3, 25-32 (2016)

Divers/Notes de cours

- Semay Claude, "Mécanique newtonienne et relativiste A1" (2016)
- Semay Claude, "Mécanique newtonienne et relativiste A2" (2016)
- Semay Claude, "Mécanique newtonienne et relativiste A3" (2016)
- Semay Claude, "Mécanique newtonienne et relativiste B" (2016)

Livre/Chapitre ou partie

- Semay Claude, "c et la relativité restreinte" in "c au Beffroi" , UMONS, 978-2-87325-098-0 (2016)
- Semay Claude, "Quelques vitesses typiques dans la nature" in "c au Beffroi" , UMONS, 978-2-87325-098-0 (2016)

Livre/Ouvrage

- Semay Claude, Silvestre-Brac Bernard, "Relativité restreinte. Bases et applications" , Éditions Dunod, 978-2-10-074703-0 (2016)

2015

Article/Dans un journal avec peer-review

- Semay Claude, "The Hellmann-Feynman theorem, the comparison theorem, and the envelope theory" in Results in Physics, 5, 322-323 (2015)
- Lacroix Gwendolyn, Semay Claude, Buisseret Fabien, "The SUSY Yang Mills plasma in a T-matrix approach" in International Journal of Modern Physics A : Particles & Fields, Gravitation, Cosmology, Nuclear Physics, 30, 24, 1550145 (2015)
- Semay Claude, "Improvement of the envelope theory with the dominantly orbital state method" in The European Physical Journal Plus, 130, 156 (2015)
- Lacroix Gwendolyn, Semay Claude, Buisseret Fabien, "Thermodynamics of the quark-gluon plasma within a T-matrix approach" in Physical Review. C : Nuclear Physics , 91, 065204 (2015)
- Semay Claude, "Numerical tests of the envelope theory for few-boson systems" in Few-Body Systems, 56, 149-156 (2015)

Vulgarisation/Autres media

- Delsate TERENCE, Semay Claude, Quinet Pascal, Palmeri Patrick, Fivet Vanessa, Lacroix Gwendolyn, Boulanger Nicolas, Chialva Diego, "Atelier "Lumière sur les trous noirs"" (2015)

2014

Vulgarisation/Autres media

- Devillers Sophie, Semay Claude, "Voyagez dans un trou de ver, comme si vous y étiez" , Journal (La Libre.be) (2014)

2013

Article/Dans un journal avec peer-review

- Semay Claude, Roland Christophe, "Approximate solutions for N-body Hamiltonians with identical particles in D dimensions" in Results in Physics, 3, 231-234 (2013)
- Semay Claude, "Aux sources de la masse" in Bulletin de l'Association Belge des Professeurs de Physique et de Chimie, 198, 26-37 (2013)
- Buisseret Fabien, Mathieu Vincent, Semay Claude, "(2+1)-d glueball spectrum within a constituent picture" in European Physical Journal C -- Particles & Fields, 73, 2504 (2013)
- Semay Claude, Buisseret Fabien, "Two- and three-body calculations within the dominantly orbital state method" in Physics Letters A, 377, 1826-1831 (2013)

- Lacroix Gwendolyn, Semay Claude, Cabrera Daniel, Buisseret Fabien, "Glueballs and the Yang-Mills plasma in a T-matrix approach" in Physical Review. D : Particles and Fields, 87, 054025 (2013)

Livre/Chapitre ou partie

- Semay Claude, "Et si la Terre tournait plus vite ?" in "Le pendule de Foucault" , SPW - UMONS (2013)
- Semay Claude, "Pendule et grandeurs physiques" in "Le pendule de Foucault" , SPW - UMONS (2013)

Vulgarisation/Presse écrite

- Daubie Evelyne, Belyi Nikita, Caebergs Thierry, Hammad Grégory, Semay Claude, Brihaye Yves, "Le boson de Brout - Englert - Higgs est-il CERNÉ ? " , Elément 08 , UMONS (2013)

2012

Article/Compte-rendu

- Semay Claude, "The Quantum N-Body Problem and the Auxiliary Field Method: New Developments" in Few-Body Systems, 53, 133-136 (2012)

Article/Dans un journal avec peer-review

- Silvestre-Brac B., Semay Claude, Buisseret Fabien, "The Auxiliary Field Method in Quantum Mechanics" in Journal of Physical Mathematics, 4, 1-82, P120601, (2012)
- Semay Claude, "Bounds for Hamiltonians with arbitrary kinetic parts" in Results in Physics, 2, 114-117 (2012)
- Lacroix Gwendolyn, Semay Claude, Buisseret Fabien, "Lagrange-mesh calculations in momentum space" in Physical Review. E : Statistical, Nonlinear, and Soft Matter Physics, 86, 026705 (2012)
- Semay Claude, "An upper bound for asymmetrical spinless Salpeter equations" in Physics Letters A, 376, 2217-2221 (2012)
- Buisseret Fabien, Matagne Nicolas, Semay Claude, "Spin contribution to light baryons in different large-N limits" in Physical Review. D : Particles and Fields, 85, 036010 (10 p.) (2012)

Colloque/Article dans les actes avec comité de lecture

- Lacroix Gwendolyn, Buisseret Fabien, Semay Claude, Cabrera Daniel, "Characterization of the pure-gluon phase in QCD." in "Xth Quark Confinement and hadron spectrum" , 196, Munich, Germany (2012)
- Semay Claude, Buisseret Fabien, Matagne Nicolas, "Static properties of light baryons in different large-N limits" in "Xth Quark Confinement and hadron spectrum" , 125, Munich, Germany (2012)
- Cabrera Daniel, Lacroix Gwendolyn, Semay Claude, Buisseret Fabien, "Relevance of glueball bound states in the Yang-Mills plasma within a many-body T-matrix approach" in "Sixth International Conference on Quarks and Nuclear Physics" , Ecole Polytechnique, Palaiseau, Paris, France (2012)

2011

Article/Dans un journal avec peer-review

- Semay Claude, Buisseret Fabien, Silvestre-Brac B., "Further Developments for the Auxiliary Field Method" in Journal of Physical Mathematics, 3, P111101 (2011)
- Lacroix Gwendolyn, Semay Claude, "Lagrange-mesh calculations and Fourier transform" in Physical Review. E : Statistical, Nonlinear, and Soft Matter Physics, 84, 036705 (7 p.) (2011)

- Silvestre-Brac B., Semay Claude, "Duality relations in the auxiliary field method" in Journal of Mathematical Physics, 52, 052107 (26 p.) (2011)
- Semay Claude, "General comparison theorem for eigenvalues of a certain class of Hamiltonians" in Physical Review. A : General Physics, 83, 024101 (2 p.) (2011)

Colloque/Article dans les actes avec comité de lecture

- Semay Claude, Buisseret Fabien, Silvestre-Brac B., "The Quantum N-Body Problem and the Auxiliary Field Method" in "21st European Conference on Few-Body Problems in Physics" , 211-213, Salamanca, Spain (2011)

Vulgarisation/Autres media

- Semay Claude, "Et si la Terre tournait plus vite ?" (2011)

2010

Article/Dans un journal avec peer-review

- Buisseret Fabien, Semay Claude, "Light baryon masses in different large-Nc limits" in Physical Review. D : Particles and Fields, 82, 056008 (7 p.) (2010)
- Semay Claude, Silvestre-Brac B., "Eigenstates with the auxiliary field method" in Journal of Physics : A Mathematical & General, 43, 265302 (22 p.) (2010)
- Silvestre-Brac B., Semay Claude, Buisseret Fabien, Brau Fabian, "The quantum N-body problem and the auxiliary field method" in Journal of Mathematical Physics, 51, 032104 (26 p.) (2010)

2009

Article/Dans un journal avec peer-review

- Buisseret Fabien, Mathieu Vincent, Semay Claude, "Glueball phenomenology and the relativistic flux tube model" in Physical Review. D : Particles and Fields, 80, Issue 7, 074021 (16 p.) (2009)
- Silvestre-Brac B., Semay Claude, Buisseret Fabien, "Semirelativistic Hamiltonians and the auxiliary field method" in International Journal of Modern Physics A : Particles & Fields, Gravitation, Cosmology, Nuclear Physics, 24, Issue 25-26, 4695-4726 (2009)
- Silvestre-Brac B., Semay Claude, Buisseret Fabien, "The auxiliary field method and approximate analytical solutions of the Schrödinger equation with exponential potentials" in Journal of Physics : A Mathematical & General, 42, Issue 24, 245301 (18 p.) (2009)
- Semay Claude, Buisseret Fabien, Silvestre-Brac B., "Towers of hybrid mesons" in Physical Review. D : Particles and Fields, 79, Issue 9, 094020 (6 p.) (2009)
- Buisseret Fabien, Semay Claude, Silvestre-Brac B., "Some equivalences between the auxiliary field method and envelope theory" in Journal of Mathematical Physics, 50, Issue 3, 032102 (6 p.) (2009)

Article/Dans un journal sans peer-review

- Semay Claude, "Les malentendus en relativité restreinte (2e partie)" in Bulletin de l'Association Belge des Professeurs de Physique et de Chimie [Bulletins de l'ABPPC], 181, 61-69 (2009)
- Semay Claude, "Les malentendus en relativité restreinte (1re partie)" in Bulletin de l'Association Belge des Professeurs de Physique et de Chimie [Bulletins de l'ABPPC], 180, 24-28 (2009)

Colloque/Article dans les actes avec comité de lecture

- Buisseret Fabien, Matagne Nicolas, Semay Claude, Stancu F., "Comparative analysis of large N_c QCD and quark model approaches to baryons" in "International Meeting ``Excited QCD''", 223-228, Zakopane, Pologne (2009)

2008

Article/Dans un journal avec peer-review

- Boulanger Nicolas, Buisseret Fabien, Mathieu Vincent, Semay Claude, "Constituent gluon interpretation of glueballs and gluelumps" in European Physical Journal A -- Hadrons & Nuclei, 38, 3, 317-330 (2008)
- Semay Claude, Buisseret Fabien, Stancu F., "Charm and bottom baryon masses in the combined $1/N_c$ and $1/m_Q$ expansion versus the quark model" in Physical Review. D : Particles and Fields, 78, Issue 7, 076003 (11 p.) (2008)
- Silvestre-Brac B., Semay Claude, Buisseret Fabien, "Extensions of the auxiliary field method to solve Schrödinger equations" in Journal of Physics : A Mathematical & General, 41, Issue 42, 425301 (27 p.) (2008)
- Semay Claude, Silvestre-Brac B., "Equation of motion of an interstellar Bussard ramjet with radiation and mass losses" in European Journal of Physics, 29, Issue 6, 1153-1163 (2008)
- Mathieu Vincent, Buisseret Fabien, Semay Claude, "Gluons in glueballs: spin or helicity?" in Physical Review. D : Particles and Fields, 77, Issue 11, 114022 (11 p.) (2008)
- Silvestre-Brac B., Semay Claude, Buisseret Fabien, "Auxiliary fields as a tool for computing analytical solutions of the Schrödinger equation" in Journal of Physics : A Mathematical & General, 41, Issue 27, 275301 (16 p.) (2008)
- Narodetskii I. M., Semay Claude, Veselov A. I., "Accuracy of auxiliary field approach for baryons" in European Physical Journal C -- Particles & Fields, 55, Issue 3, 403-408 (2008)
- Mathieu Vincent, Semay Claude, Silvestre-Brac B., "Semirelativistic potential model for three-gluon glueballs" in Physical Review. D : Particles and Fields, 77, Issue 9, 094009 (8 p.) (2008)

Colloque/Article dans les actes avec comité de lecture

- Buisseret Fabien, Semay Claude, Mathieu Vincent, Silvestre-Brac B., "Excited string and constituent gluon descriptions of hybrid mesons" in "20th European Conference on Few-Body Problems in Physics (EFB20)", 87-89, Pise, Italie (2008)
- Semay Claude, Buisseret Fabien, Stancu F., Matagne Nicolas, "Large N_c QCD versus the quark model" in "20th European Conference on Few-Body Problems in Physics (EFB20)", 103-106, Pise, Italie (2008)
- Mathieu Vincent, Buisseret Fabien, Semay Claude, Silvestre-Brac B., "The glueball spectrum from constituent gluon models" in "8th Conference on Quark Confinement and the Hadron Spectrum", 084 (5 p.), Mainz, Allemagne (2008)
- Buisseret Fabien, Semay Claude, Stancu F., Matagne Nicolas, "Light and heavy baryon masses: the $1/N_c$ expansion and the quark model" in "Mini-Workshop « Few-Quark states and the continuum »", 9-24, Bled, Slovenie (2008)
- Buisseret Fabien, Semay Claude, Stancu F., Matagne Nicolas, "Large N_c QCD and quark model for charm and bottom baryons" in "8th Conference on Quark Confinement and the Hadron Spectrum", 104 (5 p.), Mainz, Allemagne (2008)

2007

Article/Dans un journal avec peer-review

- Semay Claude, Buisseret Fabien, Stancu F., "Mass formula for strange baryons in large N_c QCD versus quark model" in Physical Review. D : Particles and Fields, 76, Issue 11, 116005 (9 p.) (2007)
- Semay Claude, Silvestre-Brac B., "Equation of motion of an interstellar Bussard ramjet with radiation loss" in Acta Astronautica, 61, Issue 10, 817-822. (2007)

- Buisseret Fabien, Semay Claude, "Effective potential between two gluons from the scalar glueball" in *European Physical Journal A -- Hadrons & Nuclei*, 33, 1, 87-93 (2007)
- Semay Claude, "Penrose-Carter diagram for a uniformly accelerated observer" in *European Journal of Physics*, 28, 5, 877-887 (2007)
- Buisseret Fabien, Semay Claude, "Relativistic corrections for two- and three-body flux tube model" in *Physical Review. D : Particles and Fields*, 76, Issue 1, 017501 (4 p.) (2007)
- Buisseret Fabien, Semay Claude, Mathieu Vincent, Silvestre-Brac B., "Excited flux tube from qqq hybrid mesons" in *European Physical Journal A -- Hadrons & Nuclei*, 32, 2, 123-126 (2007)
- Semay Claude, Buisseret Fabien, Matagne Nicolas, Stancu F., "Baryonic mass formula in large N_c QCD versus quark model" in *Physical Review. D : Particles and Fields*, 75, Issue 9, 096001 (7 p.) (2007)
- Buisseret Fabien, Semay Claude, "Bound state equivalent potentials with the Lagrange mesh method" in *Physical Review. E : Statistical Physics, Plasmas, Fluids, and Related Interdisciplinary Topics*, 75, Issue 2, 026705 (7 p.) (2007)
- Buisseret Fabien, Semay Claude, Mathieu Vincent, "Retardation effects in the rotating string model" in *European Physical Journal A -- Hadrons & Nuclei*, 31, Issue 4, 616-619. (2007)
- Buisseret Fabien, Mathieu Vincent, Semay Claude, "String deformations induced by retardation effects in mesons" in *European Physical Journal A -- Hadrons & Nuclei*, 31, 2, 213-220 (2007)

Colloque/Article dans les actes avec comité de lecture

- Mathieu Vincent, Semay Claude, Brau Fabian, "Casimir scaling, glueballs, and hybrid gluelumps" in "IVth International Conference on Quarks and Nuclear Physics, QNP 2006", 367-370, Madrid, Espagne (2007)
- Silvestre-Brac B., Mathieu Vincent, Semay Claude, "Three-gluon glueballs in a semirelativistic potential model" in "IVth International Conference on Quarks and Nuclear Physics, QNP 2006", 371-373, Madrid, Espagne (2007)

Livre/Ouvrage

- Semay Claude, Silvestre-Brac B., "Introduction au calcul tensoriel. Applications à la physique", Éditions Dunod, 978-2100505524 (2007)

2006

Article/Dans un journal avec peer-review

- Buisseret Fabien, Semay Claude, "Two- and three-body descriptions of hybrid mesons" in *Physical Review. D : Particles and Fields*, 74, Issue 11, 114018 (10 p.) (2006)
- Mathieu Vincent, Semay Claude, Silvestre-Brac B., "Semirelativistic potential model for low-lying three-gluon glueballs" in *Physical Review. D : Particles and Fields*, 74, Issue 5, 054002 (7 p.) (2006)
- Semay Claude, "Observer with a constant proper acceleration" in *European Journal of Physics*, 27, 5, 1157-1167 (2006)
- Buisseret Fabien, Semay Claude, "Covariant oscillator quark model for glueballs and baryons" in *Physical Review. D : Particles and Fields*, 73, Issue 11, 114011 (7 p.) (2006)
- Mathieu Vincent, Semay Claude, Brau Fabian, "Casimir scaling, glueballs, and hybrid gluelumps" in *European Physical Journal A -- Hadrons & Nuclei*, 27, 2, 225-230 (2006)

 2005

Article/Dans un journal avec peer-review

- Buisseret Fabien, Semay Claude, "Retardation effects in the rotating string model" in Physical Review. D : Particles and Fields, 72, Issue 11, 114004 (11 p.) (2005)
- Brau Fabian, Semay Claude, "Comment on "Glueball spectrum from a potential model"" in Physical Review. D : Particles and Fields, 72, Issue 7, 078501 (2 p.) (2005)
- Buisseret Fabien, Semay Claude, "Lagrange mesh, relativistic flux tube, and rotating string" in Physical Review. E : Statistical Physics, Plasmas, Fluids, and Related Interdisciplinary Topics, 71, Issue 2, 026705 (8 p.) (2005)
- Buisseret Fabien, Semay Claude, "Quark self energy and relativistic flux tube model" in Physical Review. D : Particles and Fields, 71, Issue 3, 034019 (10 p.) (2005)
- Semay Claude, Brau Fabian, Silvestre-Brac B., "Pentaquarks uuds with One Color Sextet Diquark" in Physical Review Letters, 94, Issue 6, 062001 (4 p.) (2005)
- Semay Claude, Silvestre-Brac B., "The equation of motion of an interstellar Bussard ramjet" in European Journal of Physics, 26, Issue 1, 75-83. (2005)

Colloque/Article dans les actes avec comité de lecture

- Narodetskii I. M., Semay Claude, Silvestre-Brac B., Simonov Yu. A., Trusov M. A., "Pentaquarks in the Jaffe-Wilczek Approximation" in "Physics of Fundamental Interactions" dedicated to the 100th Anniversary of A.I. Alikhanov's Birth, Institute of Theoretical and Experimental Physics" , 536-540, Moscou, Russie (2005)
- Semay Claude, Buisseret Fabien, Brau Fabian, "Relativistic flux tube model and Lagrange mesh calculations" in "19th European Conference on Few-Body Problems in Physics" , 439-441, Groningen, Pays-Bas (2005)
- Narodetskii I. M., Semay Claude, Silvestre-Brac B., Simonov Yu. A., "Pentaquarks in the string dynamics" in "6th International Conference on Hyperons, Charm and Beauty Hadrons (BEACH 2004)" , 383-387, Illinois Institute of Technology, Chicago, USA (2005)
- Semay Claude, Silvestre-Brac B., Narodetskii I. M., "Pentaquark spectra in the diquark picture" in "Workshop on the Physics of Excited Nucleons Nstar2004" , 90-95, LPSC Grenoble, France (2005)

 2004

Article/Dans un journal avec peer-review

- Semay Claude, "About the Casimir scaling hypothesis" in European Physical Journal A -- Hadrons & Nuclei, 22, 353-354 (2004)
- Semay Claude, Silvestre-Brac B., " $1/2^+$ uuds_ pentaquark and instanton-induced forces" in European Physical Journal A -- Hadrons & Nuclei, 22, 1-3 (2004)
- Buisseret Fabien, Semay Claude, "Auxiliary fields and the flux tube model" in Physical Review. D : Particles and Fields, 70, 077501 (4 p.) (2004)
- Brau Fabian, Semay Claude, "Semirelativistic potential model for glueball states" in Physical Review. D : Particles and Fields, 70, 014017 (8 p.) (2004)
- Semay Claude, Silvestre-Brac B., Narodetskii I. M., "Auxiliary fields and hadron dynamics" in Physical Review. D : Particles and Fields, 69, 014003 (7 p.) (2004)
- Silvestre-Brac B., Semay Claude, Narodetskii I. M., Veselov A. I., "The baryonic Y-shape confining potential energy and its approximants" in European Physical Journal C -- Particles & Fields, 32, 385-397 (2004)

2003

Article/Dans un journal avec peer-review

- Silvestre-Brac B., Brau Fabian, Semay Claude, "Electromagnetic splitting for mesons and baryons using dressed constituent quarks" in Journal of Physics : G Nuclear & Particle Physics, 29, 2685-2701 (2003)

2002

Article/Dans un journal avec peer-review

- Brau Fabian, Semay Claude, Silvestre-Brac B., "Unified meson-baryon potential" in Physical Review. C : Nuclear Physics, 66, 055202 (7 p.) (2002)
- Brau Fabian, Semay Claude, "A mass formula for light mesons from a potential model" in Journal of Physics : G Nuclear & Particle Physics, 28, 2771-2781 (2002)
- Lacombe M., Loiseau B., Vinh Mau R., Demetriou P., de Melo J. P. B. C., Semay Claude, "Testing the quark cluster model in nucleon-nucleon scattering" in Physical Review. C : Nuclear Physics, 65, 034004 (8 p.) (2002)

2001

Article/Dans un journal avec peer-review

- Semay Claude, Brau Fabian, Silvestre-Brac B., "Baryon spectra with instanton induced forces" in Physical Review. C : Nuclear Physics, 64, 055202 (7 p.) (2001)
- Semay Claude, Baye D., Hesse M., Silvestre-Brac B., "Semirelativistic Lagrange mesh calculations" in Physical Review. E : Statistical Physics, Plasmas, Fluids, and Related Interdisciplinary Topics, 64, 016703 (6 p.) (2001)

Vulgarisation/Autres media

- Semay Claude, "A la recherche des civilisations extraterrestres", Petite Collection de Galactée, UMONS (2001)

2000

Article/Dans un journal avec peer-review

- Semay Claude, "Fourier grid Hamiltonian method and Lagrange-mesh calculations" in Physical Review. E : Statistical Physics, Plasmas, Fluids, and Related Interdisciplinary Topics, 62, 8777-8781 (2000)
- Brau Fabian, Semay Claude, Silvestre-Brac B., "Semiclassical model of light mesons" in Physical Review. D, Particles and Fields, 62, 117501 (4 p.) (2000)

Divers/Autre

- Silvestre-Brac Bernard, Bonnaz Raphaël, Semay Claude, Brau Fabian, "Quantum three body problems using harmonic oscillator bases with different sizes" (2000)

1999

Article/Dans un journal avec peer-review

- Anisimov A. Yu., Narodetskii I. M., Semay Claude, Silvestre-Brac B., "The Bc meson lifetime in the light-front constituent quark model" in Physics Letters B, 452, 129-136 (1999)

- Ceuleneer R., Semay Claude, "Semirelativistic resonating group method calculations of pion-pion scattering" in Physical Review. C : Nuclear Physics, 59, 1081-1089 (1999)
- Semay Claude, Silvestre-Brac B., "Determination of quark-antiquark potentials and meson spectra" in Nuclear Physics A, 647, 72-96 (1999)
- Brau Fabian, Semay Claude, "Scattering solutions of the spinless Salpeter equation" in Physical Review. E : Statistical, Nonlinear, and Soft Matter Physics, 59, 1, 1207-1211 (1999)
- Ceuleneer R., Semay Claude, "Semi-relativistic quark model of pion-pion scattering" in Physics of Atomic Nuclei, 62, 7, 1131-1133 (1999)
- Silvestre-Brac B., Brau Fabian, Semay Claude, "Universality of Regge and vibrational trajectories in a semiclassical model" in Physical Review. D : Particles and Fields, 59, 014019 (8 p.) (1999)

1998

Article/Dans un journal avec peer-review

- Brau Fabian, Semay Claude, "Light meson spectra and instanton-induced forces" in Physical Review. D : Particles and Fields, 58, 034015 (9 p.) (1998)
- Brau Fabian, Semay Claude, "The Three-Dimensional Fourier Grid Hamiltonian Method" in Journal of Computational Physics, 139, 127-136 (1998)

Article/Dans un journal sans peer-review

- Brau Fabian, Semay Claude, "Quantum Chromodynamics and Potential Models" in Physicalia Magazine, 20, 3-18 (1998)

1997

Article/Dans un journal avec peer-review

- Semay Claude, Silvestre-Brac B., "Potential models and meson spectra" in Nuclear Physics A, 618, 455-482 (1997)

1996

Article/Dans un journal avec peer-review

- Ceuleneer R., Semay Claude, Silvestre-Brac B., "Extended RGM calculations of meson-meson scattering" in Journal of Physics : G Nuclear & Particle Physics, 22, 1395-1409 (1996)

Article/Dans un journal sans peer-review

- Semay Claude, "Le défi technologique des voyages interstellaires" in Bulletin de l'Association Belge des Professeurs de Physique et de Chimie, 131, 223-243 (1996)

1995

Article/Dans un journal avec peer-review

- Semay Claude, Silvestre-Brac B., "Mesons in the relativistic flux tube model" in Physical Review. D : Particles and Fields, 52, 6553-6561 (1995)
- Semay Claude, Silvestre-Brac B., "Effects of the one-gluon annihilation process on light diquonia" in Physical Review. D : Particles and Fields, 51, 1258-1266 (1995)

1994

Article/Dans un journal avec peer-review

- Semay Claude, Silvestre-Brac B., "Diquonia and potential models" in Zeitschrift fur Physik. C, Particles and Fields, 61, 271-275 (1994)
- Semay Claude, "On relativistic models of light mesons" in Journal of Physics : G Nuclear & Particle Physics, 20, 689-699 (1994)

1993

Article/Dans un journal avec peer-review

- Semay Claude, Ceuleneer R., "Two-body Dirac equation and Regge trajectories" in Physical Review. D : Particles and Fields, 48, 9, 4361-4369 (1993)
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