

Publications of Ioannis Anapolitanos

Research Articles:

Published

1. (With M. Lewin) Compactness of molecular reaction paths in quantum mechanics. To appear in Arch. Rational Mech. Anal.
2. (With I.M. Sigal) "Long Range behavior of van der Waals force" Comm. Pure Appl. Math., 70(9):1633-1671, 2017.
3. (With M. Hott and D. Hundertmark) Derivation of the Hartree equation for compound Bose gases in the mean field limit. Rev. Math. Phys., 29(7):1750022, 28, 2017.
4. (With M. Hott) A simple proof of convergence to the Hartree dynamics in Sobolev trace norms. J. Math. Phys., 57(12):122108, 8, 2016.
5. "Remainder estimates for the Long Range behavior of the van der Waals Interaction energy" May 2016, Ann. Henri Poincare Volume 17 (5), 1209-1261 (2016).
6. (With M. Griesemer)"Multipolarons in a constant magnetic field" Ann. Henri Poincare Volume 15 (6), pp 1037-1059 (2014).
7. (With B. Landon)"The ground state energy of the multi-polaron in the strong coupling limit" Lett. Math. Phys. 103 (12), 1347-1366 (2013).
8. "Rate of convergence towards the Hartree-von Neumann limit in the mean-field regime" Lett. Math. Phys. 98 (1), 1-31 (2011).

Proceedings

1. (With B. Landon) "On the ground state energy of the multipolaron in the strong coupling limit" Mathematical results in quantum mechanics, World Sci. Publ., Hackensack, NJ, 193-200 (2015).
2. (With I.M. Sigal) "On long range behaviour of van der Waals force" Mathematical results in quantum mechanics, World Sci. Publ., Hackensack, NJ, 47-75 (2015).

PhD Thesis

On van der Waals forces. Thesis (Ph.D.)University of Toronto (Canada). 119 pp. ISBN: 978-0494-82379-8" (2011).

Preprints

1. (With M. Lewin and M. Roth) Differentiability of the van der Waals interaction between two atoms. arXiv:1902.06683.
2. (With M. Hott) Asymptotic behavior of the ground state energy of a Fermionic Fröhlich multipolaron in the strong coupling limit. arXiv:1601.05272.