## Presentations

## Pierre-François Loos

## **Oral communications**

- 37. (Invited talk) October 2019, Conference on Light and Molecules (Marseille, France) Selected CI for Excited States
- 36. (Invited talk) September 2019, Computation and Understanding in Quantum Molecular Science (Toulouse, France)
  Selected CI for Excited States
- 35. (Invited talk) June 2019, 102nd Canadian Chemistry Conference and Exhibition (Quebec City, Canada)

  Quantum chemistry in the complex domain
- 34. (Invited talk) May 2019, CECAM workshop: Green's function methods: the next generation 4 (Lausanne, Switzerland)
  Green functions and self-consistency: an unhappy marriage?
- 33. (Invited departmental seminar) March 2019, Vrije University (Amsterdam, Netherland) Quantum chemistry in the complex domain
- 32. (Winter school lecture) January 2019, TCCM Winter School LTTC (Luchon, France) Theory and implementation of DFT-based methods
- 31. (Invited departmental seminar) December 2018, Donostia International Physics Center (Spain) Selected CI and Jastrow-free QMC methods for excited states
- 30. (Invited talk) August 2018, Molecular Electronic Structure (Metz, France) Selected CI and Jastrow-free QMC methods for Chemistry
- 29. (Selected talk) June 2018, Strong correlation in electronic structure theory (Strasbourg, France) Green functions and self-consistency: an unhappy marriage?
- 28. (Invited departmental seminar) May 2018, University of Cambridge (UK) Selected CI and Jastrow-free QMC methods for Chemistry
- 27. (Winter school lecture) January 2018, TCCM Winter School LTTC (Luchon, France) Theory and implementation of DFT-based methods
- 26. (Selected talk) August 2017, TouCAM 2017 (Toulouse, France) Dressing the CI matrix with explicit correlation
- 25. (Invited departmental seminar) September 2017, University of Basel (Basel, Switzerland) Expensive methods, cusps, integrals and other stuff
- 24. (Selected talk) August 2017, WATOC 2017 (Munich, Germany)
  Dressing the CI matrix with explicit correlation

23. (Invited talk) July 2017, 17th International Conference on Mathematical Methods in Science and Engineering (Cadiz, Spain)

Electron-nucleus cusp dressing in single-determinant wave functions

22. (Invited departmental seminar) June 2017, University of Aix-Marseille (Marseille, France) Density-functional theory using finite uniform electron gases

21. (Invited talk) May 2017, Workshop on "Theory and applications of RPA and beyond in physics and chemistry", (Paris, France)

Density-functional theory using finite uniform electron gases

20. (Invited departmental seminar) March 2017, University of Nantes (Nantes, France) Density-functional theory using finite uniform electron gases

19. (Invited talk) December 2016, Australian Symposium in Computational Chemistry (Perth, Australia)

Excited states of Wigner crystals

18. (Invited talk) September 2016, Molecular Electronic Structure (Buenos Aires, Argentina) Three-electron integrals over Gaussian basis functions

17. (Invited talk) August 2016, New Zealand Institute of Chemistry Conference (Queenstown, New Zealand)

How does Chemistry work in one dimension?

16. (Invited talk) July 2016, 16th International Conference on Mathematical Methods in Science and Engineering (Cadiz, Spain)

Nodal surfaces in quasi-exactly solvable models

15. (Organizer & Lecturer) June 2016, 2nd Quantum and Computational Chemistry Student Conference (Cass, New Zealand)

Density-functional theory for molecules

14. (Invited departmental seminar) June 2016, Institute of Fundamental Sciences, Massey University (Palmerston North, New Zealand):

Density-functional theory using finite and infinite uniform electron gases

13. (Invited departmental seminar) May 2016, Department of Chemistry, University of Canterbury (Christchurch, New Zealand):

Density-functional theory using finite and infinite uniform electron gases

12. (Invited talk) January 2016, 7th Asia-Pacific Conference of Theoretical and Computational Chemistry (Kaohsiung, Taiwan)

Three-electron coalescence conditions

- 11. (Invited talk) September 2014, Molecular Electronic Structure Workshop (Amasya, Turkey): How Good are the Hartree-Fock Nodes?
- 10. (Invited talk) July 2014, Quantum Monte Carlo in the Apuan Alps IX (Vallico Sotto, Italy): Electronic-Structure Calculations in a 1D world
- 9. (Selected talk) July 2014, 14th Theoretical Chemist Meeting (Paris, France): DFT and Chemistry in One Dimension

8. (Winter school lecture) June 2014, Quantum and Computational Chemistry Student Conference (Cass, New Zealand):

Quantum Monte Carlo for electrons

- 7. (Invited talk) July 2013, Quantum Monte Carlo in the Apuan Alps VIII (Vallico Sotto, Italy): Generalized Local Density Approximation in One Dimension
- 6. (Invited departmental seminar) June 2013, Physics Colloquium, University of Melbourne (Melbourne, Australia):

Lessons from electron(s) on a (hyper)sphere

- 5. (Invited talk) June 2011, Mathematical Methods in Quantum Chemistry (Oberwolfach, Germany): Lessons from electron(s) on sphere(s)
- 4. (Departmental seminar) September 2008, COTAW (Namur, Belgium): Single-strand breaks induced by low-energy electrons in DNA
- 3. (Selected talk) July 2008, 10th Theoretical Chemist Meeting (Dinard, France): Treatment of biological systems within the Local Self-Consistent Field method
- 2. (Selected talk) September 2007, 6th Eastern Theoretical Chemist Meeting (Strasbourg, France): Theoretical investigation of the geometries and UV/Vis spectra of Poly(L-glutamic acid) featuring photochromic azobenzene side chain.
- 1. (Departmental seminar) September 2006, Applied Theoretical Chemistry Group (Namur, Belgium): Theoretical study of solvent effects on the geometries and the spectroscopic properties of coumarin derivatives.

## Poster presentations

- 9. July 2010, 12th Theoretical Chemist Meeting (Namur, Belgium): A tale of two electrons: correlation at high density
- 8. July 2008, 10th Theoretical Chemist Meeting (Dinard, France): Electron attachment on biomolecules: including environment effects with hybrid approaches
- 7. September 2007, 6th Eastern Theoretical Chemist Meeting (Strasbourg, France): Single-strand breaks induced by low-energy electrons in DNA
- 6. July 2007, Methods and Applications of Computational Chemistry: 2nd Symposium (Kiev, Ukraine):
  - QM/MM investigation of single-strand breaks induced by low-energy electrons in DNA
- 5. November 2006, 15th Conference on Current Trends in Computational Chemistry (Jackson MS, US):
  - Self-Consistent Localized Bond Orbitals within the Local Self-Consistent Field Method
- July 2006, 10th Theoretical Chemist Meeting (Nancy, France):
   Taking the core electrons into account to improve the hybrid Quantum Mechanics/Molecular Mechanics Frontier
- 3. June 2006, International Society of Quantum Biology and Pharmacology, ISQBP President's Meeting (Strasbourg, France):
  - Taking the core electrons into account to improve the hybrid Quantum Mechanics/Molecular Mechanics Frontier

- 2. June 2005, 5th Eastern Theoretical Chemist Meeting (Reims, France): Optimization of localized orbitals within the local Self-Consistent Field method
- 1. June 2004, 10th Numerical Simulation Workshop (Paris Jussieu, France): Structural investigation of polymer-grafted-silica nanoparticles via small-angle neutron scattering: a Monte-Carlo study