Curriculum vitae

January 2023

REMACLE

Françoise Fernande Andrée

Citizenship: Belgian

Birth date : 18/11/1964

Address : Chimie Physique Théorique, Département de Chimie, B6c, Allée du 6 Août, 11, Université de Liège, B4000 Liège, Belgium.

Tel. : 32-4-3662347, Fax : 32-4-3663413, Email : fremacle@uliege.be

website : <http://www.tcp.ulg.ac.be>

#### Positions

* Directeur de Recherches of the Fonds National de la Recherche Scientifique at the University of Liège, 2005-present.
* Head of the Theoretical Physical Chemistry group, UR MolSys, University of Liège, 2001-present.
* Invited Professor, Hebrew University of Jerusalem, Chemistry Institute, 2006-present.
* Invited Professor, Collège de France et Université Pierre et Marie Curie, Paris, May 2012.
* Maître de Recherches of the Fonds National de la Recherche Scientifique at University of Liège, 2001-2005.
* Chercheur Qualifié of the Fonds National de la Recherche Scientifique at the University of Liège, 1993-2001.
* Chargé de Recherches of the Fonds National de la Recherche Scientifique at the University of Liège, academic years 1991-93.
* Post-doctoral fellow of the Hebrew University of Jerusalem, 1/07/1990-30/09/1991 with Prof. R. D. Levine.
* Aspirant of the Fonds National de la Recherche Scientifique Belge at the University of Liège, academic years 1986-90.

#### Education

* Under-graduate: Licencié en Sciences Chimiques, with the Highest Honors and the congratulations of the Jury, University of Liège, July 1986.
* Graduate : University of Liège, Département of Chemistry, Molecular Dynamics , Prof. J.-C. Lorquet, 1986-1990.
* Ph.D. : Docteur en Sciences Chimiques, with the Highest Honors and the congratulations of the Jury, Liège University, March 27th, 1990.
* Agrégé de l’Enseignement Supérieur (Habilitation thesis) with Unanimity of the Faculty of Sciences, University of Liège, May 2001.

#### Awards

* Emmy Noether Distinction for Women in Physics of the European Physical Society, Autumn-Winter 2017.
* Fellow of the American Physical Society, 2009
* Prize of the Friends of the University of Liège, Nov 2002.
* Lauréate du Prix Louis d’Or de la Société Royale des Sciences de Liège 1996.
* Prize of the ‘Concours Annuel’ 1991 of the Royal Academy of Belgium, Class of Sciences, Group III/A, October 1991.
* Prize of the Foundation for Encouraging Research in Exact Sciences, Liège University, October 1991.
* ‘Lauréat du concours des bourses de voyages’, Communauté française de Belgique, 1990.
* Prize of the best ‘mémoire’ of the Royal Chemical Society of Belgium, July 1986.

**Research interests:**

**Theoretical Physical Chemistry – Computational Chemistry**

• Molecular logic using intra- and inter- molecular dynamics, with special emphasis on the implementation of massively parallel logic operations and multivalued logic.

• Attochemistry : control of chemical reactivity by ultrafast (attosecond) optical excitation in molecules.

• Dynamics of excited states in dense level systems and the control of energy and charge transfer : polyatomic molecules, high molecular Rydberg states, site-selected reactivity in small ionized peptides, arrays of metallic quantum dots.

• Electronic, structural, mechanical, optical, transport and magnetic properties of molecular and supramolecular and nanosystems: Diels-Alder adducts, arrays of metallic quantum dots, functionalized gold nanoclusters, supramolecular complexes, including DNA and peptides fragments.

• Systems biology : Information Theoretic Approach for the analysis of high throughput genomic and proteomic data

#### Teaching activities

* Theoretical Chemistry, 2nd BAC Chemistry
* Quantum Chemistry, 3rd BAC Chemistry
* Advanced Quantum Chemistry, 1st Master Chemistry
* Molecular Logic : Master and graduate course, also at the Hebrew University of Jerusalem.

#### Other academic activities

* Member of the International Scientific Advisory Committee of Stereodynamics meetings, 2022-
* Member of the International Advisory Board of the Max Planck Institute for complex systems in Dresden, 2021-2026.
* Member of the CECAM (centre européen de calcul atomique et moléculaire) Council, 2020-
* Member of the COMA (Comité d’accompagnement - Advisory Committee) of FRS-FNRS 2020-2023.
* Vice-President of the Research Council for Sciences and Engineering of the University of Liege, 2021-2023, member 2020-2023, Member of the Research Council of the University of Liege (2021-2023).
* Member of the Orientation Committee of the ARES (Académie de Recherche et d’Enseignement Supérieur)- Wallonia-Brussels Federation, Belgium, 2021-
* Member of the International Advisory Board of the ATTO VIII conference (Orlando, 2022); ATTO XIX, Korea, 2023)
* Member of the Technical program committee of 23nd International conference of ultrafast phenomena 2022 (UP2022), Montreal, Canada organized by Shanghai Institute of Optics and Fine Mechanics (SIOM), the European Physical Society (EPS) and the Optical Society of America (OSA).
* Member of the Technical program committee of 22nd International conference of ultrafast phenomena 2020 (UP2020), Shanghai, China, organized by Shanghai Institute of Optics and Fine Mechanics (SIOM), the European Physical Society (EPS) and the Optical Society of America (OSA).
* Member of the International Conference on Photonic, Electronic and Atomic Collisions XXX1 ICPEAC committee, 2017-2019.
* Foreign member of the evaluation committee of the National Science and Engineering research council (NSERC) of Canada, Chemistry, 2010-2013.
* Member of the evaluation Committee of the EastChem Department (University of Edinburgh and of St Andrews), 2011-2015.
* Member of the board of the ‘Comité des Sociétés chimiques belges’, 2006-
* Member of the Research Council of the University of Liège, 1999-2006.
* Member of the Physical Chemistry Committee of the Flanders Research Foundation of Belgium (FWO), 2002-2008.
* Member of the Exact Sciences Evaluation Committee of the Fonds National de la Recherche Scientifique, FNRS-FRS, French Community of Belgium, 2012-2014. Member of the FRAI Jury PE3 (2014-2017).
* Founding member and Secretary of the ASBL interuniversity NANOWAL, the Wallonia network for nanotechnologies, 1998-
* Vice-President of the Royal Society of Sciences of Liège, 2004-2005.
* President of the Royal Society of Sciences of Liège, 2005-2006.
* Member of the Committee for International Relations, University of Liège, 2003-2006.
* Reviewer for research national foundations (Germany, Holland, Israel, Austria and for NSF (US)).
* Panel expert EC: FP6, FP7, ERC, H2020 and Horizon Europe.
* Referee for general, chemistry and physics journals.

**Participation to research projects**

**Running projects**

**United States**

European theoretical partner in the project LCLS-SLAC (Stanford) project ‘Time-Resolved Photoemission from Quantum Systems Confined on the Nanoscale’ coordinated by Matthias Kling.

**European**

* **Core member of the COST action ATTOCHEM (CA18222)** : Attosecond Chemistry, 2019-2022.
* Partner in the ULiege team of the EC master program : FAMAIS Erasmus Mundus plus, 2018-2028.

**French Community of Belgium**

* **Research project EOS –** **Tethered**- Coordinator C.A. Fustin, UCLouvain. Leader of the WP modeling, 2022-2025.
* **Research project from FNRS-FRS PDR MONACOMP** **T.0205.20,** Molecular and NAno COherent coMPuting, 2020-2023, PI.
* **Action de recherches concertées, MECANOCHEM, ULiège,** 2019-2022, CoPI in charge of modeling. Main PI. Prof. A.S. Duwez.

**Previous international projects**

**United States**

* **PI in the project** ‘Exploiting Non-equilibrium Charge Dynamics in Polyatomic Molecules to Steer Chemical Reactions’, Department of Energy, Office of Basic Energy Science, Atomic and Molecular Optical Sciences, #DE-SC0012628. Coordinator : Prof. Wen Li, Wayne State University, Detroit. 2014-2017. Partners : M. Murnane, U. of Colorado, Boulder, H. B. Schlegel, Wayne State University, Detroit, R. D. Levine, University of California, Los Angeles. Renewal: Probing and Controlling Non-Equilibrium Multi-Electron Dynamics Towards Spatially and Temporally Resolving Chemical Reactivity in Molecules, 2017-2019.

**European Commission**

* **Coordinator of the EC FET Open H2020 project: COPAC #**766563**,** 2017-2021: Coherent Optical Parallel Computing**.** Partners : Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. Yossi Paltiel, The Hebrew University of Jerusalem, Prof. Elisabetta Collini, University of Padova, Dr. Barbara Fresch, University of Padova, Dr. Marinella Striccoli, CNRS-Bari, Dr. Emmanuel Mazer, Probayes, Dr. Ariela Donval, ELBIT.
* **Partner of the EC FET Open FP7 project : BAMBI,** 2014-2016: Bottom up approaches to machine dedicated to Bayesian Inference. Leader of WP2. Coordinator: Dr. Jacques Droulez, UPMC-College de France, Paris. Partners Dr. Pierre Bessière, UPMC-Collège de France, Dr. Julie Grolliez, UMf-CNRS-Thales, Dr. Damien Querloz, IEF, Emmanuel Mazer, Probayes, Prof. Jorge Lobo, ISR, Coimbra, Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. Claire Remacle, ULiège.
* **Coordinator of the EC FET STREP FP7 project : MULTI,** 2012-2016 : Multivalued parallel molecular logic. Partners : Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. I. Willner, The Hebrew University of Jerusalem, Prof. Elisabetta Collini, University of Padova, Prof. Sven Rogge, University of New South Wales, Sydney, Australia.
* **Partner of the EC FET STREP FP7 project : TOLOP,** 2012-2016: Towards Low Power ICT. Leader of WP3. Coordinator: Dr. David Williams, Cambridge, Hitachi Laboratory, UK, Partner: Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. Stefanos Kaxiras, Upsala University, Sweden, Dr. Marc Sanquer, CEA, Grenoble, Prof. Sven Rogge, University of New South Wales, Sydney, Australia.
* **Coordinator of the EC FET Proactive STREP FP7 project : MOLOC,** 2008-2011 : Molecular Logic Circuits. Partners : Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. I. Willner, The Hebrew University of Jerusalem, Prof. K. L. Kompa, Max Planck Institute for Quantum Optics, Garching, Prof. R. Weinkauf, Dusseldorf University, Prof. Th. Halfmann, Darmstadt University, Prof. R. Waser, Jülich Research Centrum, Prof. S. Rogge, TU-Delft.
* **Coordinator of the EC FET-Open STREP FP6 project : MOLDYNLOGIC,** 2005-2008. Partners : Prof. R. D. Levine, The Hebrew University of Jerusalem, Prof. I. Willner, The Hebrew University of Jerusalem, Prof. K. L. Kompa, Max Planck Institute for Quantum Optics, Garching, Prof. R. Weinkauf, Dusseldorf University, Prof. J.-P. Sauvage, Université Louis Pasteur, Strasbourg.
* Partner in the ULg team of the EC master program : FAME Erasmus Mundus, 2008-2018
* Partner in the ULg team of the EC FP7 PhD School IDSFUN-MAT, 2010-
* **Member of the COST action MOLIM (CM1405)** : molecules in action, 2015-2020.
* **Member of the COST action XLIC (CM1204):** XUV/X-ray light and fast ions for ultrafast chemistry, 2012-2018
* **Member of the COST action** : Rational design of hybrid organic-inorganic interfaces: the next step towards advanced functional materials, 2012-2016.

**Active collaborations**

* + Prof. Eleanor Campbell, University of Edinburgh, United Kingdom.
  + Prof. Francesca Calegari, DESY- Hamburg, Germany
  + Prof. Elisabetta Collini, University of Padova, Italy.
  + Prof. Anne-Sophie Duwez, UR MOLSYS, ULiège
  + Prof. James R. Heath, President of the Institute for Systems Biology, Seattle, USA.
  + Prof. Manabu Kanno, Tohoku University, Sendai, Japan
  + Prof. Matthias Kling, MPQ Garching and LMU, Munich.
  + Prof. H. Kono, Tohoku University, Sendai, Japan
  + Prof. Raphael D. Levine, The Hebrew University of Jerusalem.
  + Prof. Wen Li, Wayne State University, Detroit, USA.
  + Prof. Margaret Murnane, University of Colorado, Boulder, USA.
  + Prof. Yossi Paltiel, The Hebrew University of Jerusalem
  + Prof. Sven Rogge, Centre for quantum communication and information, UNSW, Sydney, Australia.
  + Prof. Marc J. J. Vrakking, Max Born Institute, Berlin, Germany.
  + Prof. Bernhard H. Schlegel, Wayne State University, USA.
  + Prof. Itamar Willner, The Hebrew University of Jerusalem.
  + Prof. Hans-Jakob Woerner, ETH, Zurich.

#### Organization of meetings

* Web Symposium ‘Parallel information processing at the nanoscale’, held on line March 23th -25th, 2021.
* Project COPAC webmeeting, Dec 22 and Dec 30 2020
* Project COPAC meeting, Asiago, Feb 17-19, 2020.
* Project COPAC meeting, Annecy, 03-06 May 2019.
* Kick off meeting of the FET-open H2020 COPAC, Tel-Aviv, December 2017.
* Nano information Processing Perspectives, Cambridge, UK, December 13th -16th, 2015. Co-organizer with F. Gonzalez-Galba (Hitachi Cambridge), R. D. Levine (HUJI) and D. Williams (Hitachi-Cambridge). Chair of the session: Optical Computing.
* Project meeting FET FP7 project **MULTI**, Hebrew University, Jerusalem, Aug 31-September 4th, 2014.
* 4th Workshop NANOWAL, May 21st, 2014 : Bio-inspired synthetic functional molecules
* Kick-off meeting of FET FP7 project MULTI, Padoue, September 11-13 2012.
* Member of the organizing committee of the ISSPIC XVI in Leuven, July 2012.
* Final FET FP7 project MOLOC meeting, Brussels, Aug 31st-September 2nd, 2011.
* Molecular Logic, Lorentz Center, Leiden, May 30th-June 2nd 2011, organizer with S. Rogge (TU-Delft) and I. Willner (HUJI)
* Third year FET FP7 project MOLOC meeting, Vaalsbroek Castle, Vaals, Germany, March17th-18th, 2011
* Organizing committee member of the RCTF 2010 meeting : Structure électronique et réactivité, co organizer Michel Godefroid, ULB.
* Second year FET FP7 project MOLOC meeting, Dusseldorf, Castel Michle, March 17-March 19, 2010
* May 8th, 2009 : Organisation du Symposium Molecular and nano electronics, Liège. Nanowal meeting
* April, 27th, 2009 : organisation first year review meeting of the FET FP7 project MOLOC, Liège, Belgium.
* March 1-3th, 2009 : Organisation du first year FET FP7 project MOLOC meeting, Jerusalem, Israël
* February 16th, 2009 : PAI WP1 meeting at KUL
* November 25th, 2007 : PAI first year meeting.

**Publications**

278 publications in international peer reviewed journals, h Index: 48 (Google scholar), 8600 citations. A full list can be found at <http://www.tcp.ulg.ac.be>.

Links towards publications

Google Scholar : <https://scholar.google.com/citations?user=lBZTixAAAAAJ&hl=en>

Orbi (Repository of ULiège) :

<https://orbi.uliege.be/ph-search?uid=u013667>

**Editing**

Co-Editor, with R. Kosloff, E. Rabani of Special Issue “Energy and Entropy of Change: From Elementary Processes to Biology”, Chemical Physics 514 (2018)

**Training activities**

**Master Students**

* **Julie Hammoud**, 2022-2023, Uliege, Supervisor, Master Thesis
* **Martin Blavier**, 2021-2022, ULiege, Supervisor Master Thesis.
* **Laura Jadin,** 2018-2019**,** ULiège, supervisor Master Thesis.
* **Gabriel Boitel-Aulen,** 2017, Erasmus Master 1 internship from the University Pierre and Marie Curie, Paris.
* **Raphael Mourier**, 2016, Master 1 internship from University Pierre and Marie Curie, Paris.
* **Stephan Vandenwildenberg,** 2015-2016, ULiège, Supervisor Master thesis.
* **Valérie Schwanen**, 2014-2015, ULiège, supervisor Master Thesis.
* **Tristan Lespagnard**, 2010, Etude théorique et expérimentale de l’interaction entre la guanine et un agrégat ou une surface d’or, co-supervisor master thesis**.**
* **Benoît Mignolet**, 2010, Theoretical study of the ultrafast electron dynamics induced by an atto pulse in the neutral and cationic state of the ABCU molecule, supervisor.
* **Marc Dewergifosse**, 2006, Electronic dynamics in a linear chain of metallic quantum dots and implementation of ternary logic, supervisor.
* **Jean-François Greisch**, 2001, Optimisation de la Désorption-Ionisation laser de petites molécules, co-supervisor.

**PhD students**

* **Shouryo Ghose**, Projet EOS Thethered, 2023-2027.
* **Pietro Di Checci,** ULiege teaching assistant, 2021-2023.
* **Manuel Alejandro Cardosa-Guiterrez,** ULiege PhD fellowship, project ARC MECHANOCHEM, 2020-2023.
* **Julien Stiennon,** ULiege Teaching assistant, 2019-2020.
* **Stephan van den Wildenberg,** teaching assistant, 2016-2017, FRIA Fellow, 2017-2020. PhD in 2020Present : Post-doc at UCSD in the group of Joel Zhou.
* **Pavel Rukin,** PhD trainee, The photochemistry Institute of the Russian Academy, Moscow, August 2015-February 2016. PhD in Moscow in 2018.
* **Valérie Schwanen,** supervisor, Aspirant FNRS 2015-2018.
* **Gustavo Lugo**, supervisor, 2013-2016, EC PhD School IDS-FunMAT, co-supervisor : C. Chaneac, UPMC, Chemistry Schools of Paris. PhD in 2016.
* **Fabien Dufour**, co-supervisor with Corinne Chaneac, Collège de France and UPMC, Chemistry Schools of Paris, Elaboration de nanocomposites inorganiques fonctionnels, oxydes de titane et/ou métalliques, par l’adsorption sélective de molécules organiques. Approches expérimentale et théorique combinées, 2010-2013, PhD School IDS-FunMAT, 2013. Presently : Researcher at Michelin R&D, Clermont-Ferrand.
* **Benoît Mignolet,** supervisor, Theoretical study of the molecular dynamics induced by intense ultrashort optical pulses : control of chemical reactivity and information processing at the molecular level, 2010-2014. Chargé de recherches FNRS 2015-2018, Scientific collaborator, ULiege, 2018-2019s.
* **Renuka Ganesan**, supervisor, Etude théorique des propriétés électroniques optiques et de conduction de complexes hybrides agrégats métalliques-ligands organiques en vue d'applications à la logique moléculaire, 2009-2013. PhD 2013. Presently Assistant Professor, Bangalore College.
* **Tristan Lespagnard**, supervisor, Etude théorique et quantique de complexes supramoléculaires ancrés sur des nanoparticules et des surfaces, 2010-2011.
* **Cheng-Gen Zhang**, Academy of Sciences, Beijing, Supervisor Prof. Zhixiang Wang. Training period Dec 2008-Dec 2009 : Theoretical studies of the geometry, electronic states and transport properties of large gold clusters, and hybrid organic ligand-gold cluster complexes. PhD in 2010.
* **Jean-François Greisch** (co-supervisor) : The geometry, electronic states and transport properties of large gold clusters, and hybrid organic ligand-gold cluster complexes, 2010.
* **Pascale Urbain** (co-supervisor) : Etude de la dynamique des reactions monomoléculaires par analyse des distributions d'énergie cinétique, 1998.

**Post-docs**

* **Dr. Gaurav Pandey,** 2023-2024, Post-doc PDR MONACOMP.
* **Dr. James Hamilton,** 2020-2023, postdoc on the PDR MONACOMP.
* **Dr. Cayo Gonçalvez,** 2018-2020, post-doc on the PDR Ultrafast bond making.
* **Dr. Hugo Gattuso,** 2017-2020, Post-doc on the COPAC project. Present : Cofund post-doc in Madrid.
* **Dr. Alessio Valentini**, 2016-2020, post-doc on the PDR ‘Ultrafast bond making’. Present : Post-doc in Todd Martinez group in Stanford.
* **Dr. Benoit Mignolet,** FNRS Research Associate at ULG, 2014-2018. Scientific collaborator ULiege, 2018-2019. Present : Manager at Dexia bank, Brussels.
* **Dr. Kenny Bogaert,** 2016, Present : Research Associate at UGent
* **Dr. Ksenya Vladimirova,**  2014-2017, Present : Post-doc at the Hebrew University of Jerusalem
* **Dr. Barbara Fresch**, 2011-2016, Present: Assistant Professor, the University of Padova.
* **Dr. Stephan Knippenberg,** 2012-2014, Present: Researcher Solvay Institute, Brussels.
* **Dr. Daniele Pepe,** 2014-2015, Present Post-doc at the University of Hasselt.
* **Dr. Ana Ballester,**  2014-2016.
* **Dr. Shoutian Sun**, 2014-2015, Present : Research Associate, University of Shanghai.
* **Dr. Astrid Nikodem**, 2014-2016, Present Software engineer, AVL LIST GmbH, Graz, Austria, in the section "CDS - Multiphysical Systems"**.**
* **Dr. Tian-Yan**, 2013-2014. Present : Researcher Associate at the Shanghai Advanced Research Institute.
* **Dr. Mykhailo Klymenko**, 2012-2016. Present : Post-doc, cluster department, RMIT University, Melbourne, Australia.
* **Dr. Tomasz Kus,** 2012-2014, Present Senior Software Engineer at DNV GL, Poland.
* **Dr. Thomas Guillon,** 2010-2011.
* **Dr. Yong-Hong Yan** , 2009.
* **Dr. Ganga Periyasamy**, 2008-2009, Present : Assistant Professor, University of Bangalore
* **Dr. Eugène Kryachko**, 2005-2009.

**Oral presentations and participation to scientific meetings 2017-2023**

172. Invited speaker, Nobel Symposium on Attosecond science and technology, Stockholm, Sweden, August 20-24, 2023.

171. Invited speaker, Quantum Battles in Attoscience 2023, University College London, June 28-30, 2023.

170. Keynote lecture, Control of photoinduced ultrafast attosecond coherent dynamics in molecules, APATCC-10 meeting, Quy NhonVietnam on 19-23 Feb 2023.

169. Conférence à la Classe des Sciences de l’Académie Royale des Sciences de Belgique, Contrôler les électrons : Un nouveau régime de la dynamique chimique, 24 janvier 2023, Bruxelles, Belgique.

168. Invited conference, Exploiting electronic entanglement for steering selective bond formation in molecules pumped by ultrashort optical pulses, Theory Days workshop, Toulouse, Nov 23-25, 2022.

167. Hot topic talk, Exploiting electronic entanglement for steering selective bond formation in molecules pumped by ultrashort optical pulses, Stereodynamics 2022, Rethymnon, Crete, Oct 30-Nov 4, 2022.

166. Contributed talk, ATTOVIII,Exploiting electronic coherences for steering selective bond formation in molecules pumped by ultrashort optical pulses, Orlando, July 8th-15th, 2022

165. Invited speaker, MOLEC 2022, 23rd Conference on the Dynamics of Molecular Systems, Exploiting electronic coherences for steering selective bond formation in molecules pumped by ultrashort optical pulses. Hamburg, Aug 22-Aug 26, 2022.

164. Invited keynote talk, ‘Quantum parallelism at room temperature by coherent excitonic dynamics of an ensemble CdSe quantum dot dimers’, NanoIsrael, Oct 4-6, 2021.

163. Invited talk, ‘“Exploiting electronic coherences for steering selective bond formation in molecules” Web symposium Attochem Young Scientists Symposium, Sep 14-17th, 2021.

162 : Invited talk : “Exploiting electronic coherences for steering selective bond formation in molecules” Fall 2021 ACS virtual meeting Aug22-Aug 26, 2021, Atlanta, Symposium : Synthetizing Quantum Coherences’.

161. Invited talk ‘Exploiting electronic coherences for steering selectively ultrafast reactivity in molecules’ at the international workshop ‘Attosecond to Few-Femtosecond Ultrafast Science at Future XFELs’ DESY Hamburg, organized on line June 28-June 30, 2021.

160. Invited Talk ‘Steering Nuclear Motion by Ultrafast Multistate State Non Equilibrium Quantum Dynamics in Atto Excited Molecules’, CLEO-Europe meeting, Munich, June 21-25, 2021, on line.

159. Quantum Cafe webseminar, EC- DG connect, May 20, 2021: Progress report on the COPAC project.

158. Les Houches web workshop : Quantum Dynamics and Spectroscopy of Functional Molecular Materials and Biological Photosystems. May-3-7, 2021. Contributed talk Title : Quantum parallel computing by coherent excitonic dynamics of an ensemble of size dispersed quantum dots. May 3rd.

157. AttoFridays – Quantum Battles webseminar, Exploiting electronic coherences for steering selective bond formation in molecules, Organized by University College London, organized by Carla Figueiras, March 19th, 2021.

156. Webtalk ‘Ultrafast vibronic dynamics in molecules excited by short femtosecond pulses’, February 23rd, 2021, DFG project webmeeting ‘Quantum Dynamics in Tailored Intense fields, Feb 22-25,2021, organized by Manfred Lein, Hannover.

155. Video shooting for an Introduction to Quantum Technologies, EC-DEFIS, January 18th, 2021

154. Invited talk, Ultrafast vibronic dynamics in molecules excited by short fs pulses, ATTOCHEM kick off webmeeting, September 10th, 2020

153. Invited talk, Ultrafast vibronic dynamics in molecules pump and probe by short fs pulses, ATTO-CM DoE research network workshop, Charlottesville, Virginia, Feb 27-28, 2020.

152. Invited talk, Ultrafast vibronic and photoelectron dynamics in molecules photoexcited by short femtosecond pulses, ATOM2019, Max Planck Institute for Complex Systems, Dresden, Nov 19-21, 2019.

151. Invited seminar : Photoinduced electronic and nuclear dynamics in molecules at the ‘Multiscale Dynamics in Molecular Systems’, Ecole de Physique, Les Houches, France, Aug 25th-30th, 2019.

150 : Invited talk International Society of Theoretical Chemical Physics (ISTCP-X), July 11-17th, 2019, Tromsoe, Norway, ‘Ultrafast Coherent photoinduced quantum dynamics in molecules’.

149. Invited talk ‘Ultrafast coherent energy and charge transfer in nanosystems by fs laser pulses: A quantum dynamical study of CdSe QD dimers and of functionalized gold clusters’ Computer in chemistry, Material Science, 257th ACS meeting, Orlando, March 31st-April 4th, 2019.

148. Invited talk ‘Coherent ultrafast photoinduced coupled electronic-nuclear dynamics in dense manifolds of molecular vibronic states’ at the Symposium ‘Modeling Dynamics in Dense Manifolds of Electronic States’ of the 257th ACS meeting, Orlando, March 31st-April 4th, 2019.

147. Invited talk ‘FET Open H2020 COPAC project’, Workshop “FET Innovation ecosystems: Regional support for a European Impact”, Brussels, October 25th, 2018.

146. Invited talk ‘Ultrafast Coherent Non-equilibrium Charge Dynamics in Molecules’,

2018 Atomic, Molecular and Optical Sciences Research PI Meeting , Office of Basic Energy Sciences , U. S. Department of Energy, Gaithersburg, Oct 22-24, 2018.

145. Invited talk ‘Thermodynamic-like information theoretic surprisal analysis of genomic and metabolic data’ at the Symposium Information Theory & Dynamics: From Elementary

Processes to Systems Chemistry: Symposium in honor of Raphael Levine’ of the 256th ACS meeting, Boston, August 19-23, 2018.

144. Invited talk ‘Role of electronic coherences in ultrafast non-equilibrium quantum dynamics in molecules induced by strong short optical pulses’ at the Symposium ‘Strong field in chemistry’ of the 256th ACS meeting, Boston, August 19-23, 2018.

143. Invited talk ‘Phenotype characterization of biosamples by thermodynamic-like information theoretic surprisal analysis of genomic and metabolic data’, Second Julios Palacios International Symposium, La Coruna, Spain, July 11-12, 2018.

142. Invited talk : Molecular Logic, Symposium in the honor of the 80th birthday of R. D. Levine, Israeli Academy of Science and humanities, Jerusalem, June 18, 2018.

141. Invited seminar ‘Experience as a coordinator : FET open H2020 project COPAC, FNRS, June 8, 2018

140. Invited seminar : Role of electronic coherences in ultrafast non-equilibrium quantum dynamics in molecules induced by strong short optical pulses, International Max Planck Research School, Max Planck Institute for Complex Systems, Dresden, May 30, 2018.

139. Invited talk ‘Ultrafast coherent electronic and nuclear dynamics induced by attopulses’ at the meeting 'New ideas about dynamics and mechanisms of energy relaxation and transport’, Padova, Feb 8-9, 2018.

138. Kick-off COPAC meeting, Tel-Aviv, December 12-14, 2017 : Multi-phase matching directions and logic function decomposition’.

137. Colloquium of the Institute for Molecular Sciences, Okazaki, Japan, September 22, 2017. Title: ‘Ultrafast Coherent Electronic and Nuclear Dynamics induced by Attopulses’.

136. Plenary talk ‘Ultrafast Coherent Electronic and Nuclear Dynamics induced by Attopulses’ at the Physical Chemistry Colloquium on Ultrafast Electronic and Structural Dynamics, Tohoku University, Sendai, Japan, September 19-20, 2017.

135. Plenary talk ‘Optical and Electrical Parallel Molecular and Nanoscale Computing’, Computer in Scientific Discovery 8, Mons, August 23-25, 2017.

134. Invited talk ‘Ultrafast Non equilibrium Dynamics Induced by Attopulse’ to the Symposium ‘New Frontiers in Ultrafast Photochemistry’, 28th International Conference on Photochemistry, Strasbourg, July 16th -21st, 2017.

133. Plenary talk, Ultrafast non equilibrium dynamics induced by attopulses, Molecule in Motion workshop 2017, Zurich, April 18-20th, 2017.

132. Invited talk, Ultrafast non equilibrium dynamics induced by attopulses, International workshop on photoionization, Aussois (France) March 26th -March 31st, 2017.

131. Plenary talk, Ultrafast non equilibrium dynamics induced by attopulses, MOLCAS developer meeting, Jerusalem, Feb 7-9, 2017.