Theoretical Physical Chemistry

Wed, 2016-10-05 21:14 - Francoise Remacle [1] **Website:** http://www.tcp.ulg.ac.be [2]

Research Type: Theory

The TCP group research activities focus on the theory and modeling of the dynamics of molecular systems subject to external perturbations, with applications to

- Molecular logic using quantum intra- and inter- molecular dynamics, with special emphasis on the implementation of massively parallel logic operations and multivalued logic and to quantum computing
- Attochemistry: control of chemical reactivity by ultrafast (attosecond) optical excitation in molecules
- Quantum 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, optical, transport and magnetic properties of molecular and nanosystems
- Systems biology: Information Theoretic Approach for the analysis of high throughput genomic and proteomic data

Leader: Francoise Remacle

Location

University of Liege Allee du 6 aout, 11, B6c
Liege 4000 Belgium
50° 38' 6.2736" N, 5° 33' 46.3932" E

- Quantum Control [3]
- Quantum Computation [4]
- Quantum Information Theory [5]
- Quantum Simulation [6]
- Other [7]

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