Virtual Symposium on Chemical Theory and Computation (VS-CTC)

Monday December 21

2.15 – 3.00 pm: Winners "Miglior Lavoro scientifico"

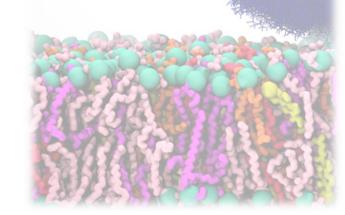
- **Fortuna Ponte** Insights from Computations on the Mechanism of Reduction by Ascorbic Acid of Pt^{IV} Prodrugs with Asplatin and Its Chlorido and Bromido Analogues as Model Systems.
- Jacopo Fregoni Strong Coupling with Light Enhances the Photoisomerization Quantum Yield of Azobenzene.
- Silvia Alessandrini Extension of the "Cheap" Composite Approach to Noncovalent Interactions: The jun-ChS Scheme.
- Francesco Di Maiolo Dynamical Disorder and Resonance Energy Transfer: a Novel Quantum-Classical Approach.

3.00 – 3.50 pm: <u>1st Flash Talk Session</u>

- Federica Lodesani Study of lithium disilicate crystallization from melt using well- tempered metadynamics.
- Andrea Phan Modelling TADF emitters: a joint theoretical and experimental study.
- Francesca Fasulo Ab initio study of singlet Oxygen formation at Li-air battery cathode.
- Stefano Pantaleone Schreibersite: a meteor which brings life.
- Martina Nucci Mechanochemical improvement of norbornadiene-based molecular solar-thermal systems performance.
- **Yasi Dai** Exploring the low-lying double-exciton state of conjugated diradicals with cost-effective single-reference and multi-reference approaches.
- Angela Parise Inhibition of main protease of SARS-CoV-2 by different candidate drugs from a computational point of view.
- **Giulio Poli** Discovery of monoacylglycerol lipase (MAGL) inhibitors based on a pharmacophore-guided virtual screening study.
- Alessandra Gilda Ritacca Reactivity of Cu(II)-TSC (thiosemicarbazone) complexes with glutathione in cytosolic environment. Theoretical study and disentanglement of Cu(II)-reduction mechanism.

3.50 - 4.00 pm: Discussion

4.00 - 4.20 pm: Virtual Coffee Break and Poster Session



4.20 – 5.10 pm: 2nd Flash Talk Session

- Jonathan Campeggio Multiscale modeling of reaction rates: application to archetypal SN₂ nucleophilic substitutions.
- Mariagrazia Fortino Hamiltonian excited state Replica Exchange for photoisomerization processes in conjugated polymers.
- **Tommaso Nottoli** CASSCF second-order algorithm with Cholesky Decomposition of the two-electron integrals matrix.
- **Anna Perfetto** Towards new theoretical approaches for the description of excited state properties and reactivity: A Density Based Approach.
- Mirko Vanzan On mechanism of hot-electron injection.
- Alessandro Rognoni How many water molecules are needed to solvate one?
- Sandra Monica Vieira Pinto A computational insight into the relationship between side chains IR lineshapes and local environment in fibril-like structures.
- Marco Mendolicchio A unified GVPT2 treatment of abelian and non-abelian symmetries for the energies and intensities of vibrational spectra.
- Anna Rovaletti Hydrogen activation by the aerobic MoCu-dependent CO-dehydrogenase
- **Diego Sorbelli** Unravelling the electronic structure of heavy-element-containing molecules with relativistic approaches: the case of gold dihydride.

5.10 – 5.20 pm: Discussion

5.20 pm: CTC Video Contest & Videos Poll

5.40 – 6.10 pm: *Keynote*

• Rommie E. Amaro - Computational Microscopy of SARS-CoV-2

6.10 pm: Conclusions & Greetings

