Ab initio study of the optical properties of green fluorescent protein

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List of publications

- M. Zaccheddu, C. Filippi, and F. Buda, *Anion-π and π-π interactions regulating the self-assembly of nitrate-triazine-triazine complexes*, J. Phys. Chem A, **112**, 1627 (2008).
- M. Zaccheddu, L. Guidoni, and C. Filippi, *Gas-phase optical properties of the Green Fluorescent Protein chromophore: A theoretical study*, (in preparation).
- M. Zaccheddu, L. Guidoni, and C. Filippi, *Impact of the protein environment on the spectra of Green Fluorescent Protein*, (in preparation).

Curriculum Vitae

I was born on the 14th of June 1978 in Cagliari, Italy. I did my high school studies at the Liceo Scientifico L. B. Alberti in Cagliari, and received my diploma in July 1997. In the same year, I enrolled as an undergraduate student at Cagliari University where I graduated in Physics in April 2003. I conducted my master thesis in the field of dielectric properties of amorphous materials under the supervision of Prof. Vincenzo Fiorentini. From September 2003 to December 2003, I was employed as researcher in the computational solid state physics group in the Physics Department at Cagliari University.

In December 2003, I started my PhD at the Instituut-Lorentz under the supervision of Prof. Claudia Filippi. During my PhD, I presented my work at several international conferences as oral or poster contributions. Particularly relevant were the workshops *Progress in ab initio modeling of biomolecules: Methods and applications* (Leiden, 2006), *Progress in ab initio modeling of biomolecules: Towards computational spectroscopy* (Rome, 2007), and *Workshop on computational material science: Total energy and forces methods* (Trieste, 2007). I also attended several schools as the joint DEMOCRITOS-ICTP School on *Continuum Quantum Monte Carlo Methods* (Trieste, 2004), and the two schools organized by the Dutch Research School of Theoretical Physics (DRSTP) in Nijmegen in 2004 and 2005.

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It was a pleasure to be part of the Instituut-Lorentz and problems of space make it difficult to thank all the people with whom I shared my days there. I will just mention few of them: Jonathan, Kepa, Chiara, XiaoFeng, Babak, Gianluca, Rachel, and Petja. A special thank goes to Luuk for helping me with the translation of the Samenvatting. I am also very grateful to our secretaries, Fran and Marianne, for the help they gave me to settle in this country and to handle Dutch bureaucracy.

During these four years in Leiden, I met many new people and with some of them I spent some beautiful moments; therefore, I would like to thank all my friends.

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