

UNIVERSITY OF OTTAWA - NRC JOINT CENTRE FOR EXTREME PHOTONICS POSTDOCTORAL POSITION IN COMPUTATIONAL PHOTONICS

We are seeking an exceptional candidate for a Postdoctoral Fellowship position in theoretical and computational photonics. Working with a team of top researchers in ultra-fast/attosecond science and nanophotonics, the successful candidate will construct theoretical models and employ large scale simulations, with the goal of expanding scientific understanding of high harmonic generation (HHG) in nanostructured solids. They will also apply such understanding to the design of nanostructured materials for novel HHG technologies. The research is ground breaking and has far reaching implications for applications such as semiconductor technology, photo electron spectroscopy, high intensity VUV and EUV sources and nanoscale imaging.

In addition to working collaboratively within a multi-disciplinary team, the successful candidate will also mentor and oversee the activities of graduate students, publish research findings, and present at international conferences.

Led by Professor Lora Ramunno, the Computational Nanophotonics Lab at the University of Ottawa's Centre for Research in Photonics (CRPuO) offers exciting opportunities to conduct collaborative, interdisciplinary research with such world renowned groups as the Max-Planck uOttawa Centre for Extreme and Quantum Photonics, Canada's National Research Council (NRC), the uOttawa-NRC Joint Centre for Extreme Photonics (JCEP), and various industrial partners. The lab also benefits from access to Canada's largest, state-of-the-art, supercomputers.

QUALIFICATIONS

The successful candidate will have a PhD in Physics or a related field combined with deep knowledge of optics and photonics, in particular nanophotonics and/or intense laser-matter interaction. Experience in computational physics, and designing, coding and documenting scientific computing software is required, as is fluency in both spoken and written English. Strong analytical and creative problem solving skills - and a desire to work collaboratively while demonstrating initiative in pursuing challenging avenues of research - are essential.

Understanding of high harmonic generation, nonlinear nanophotonics, FDTD and/or other modelling techniques, experience in nanophotonics device design, and use of high performance computing machines would also be assets.

The position offers competitive compensation as well as the opportunity to participate in international conferences and present research findings to the scientific community.

To apply for this exciting opportunity, please send your CV, covering letter and references to smoyniha@uottawa.ca.

ABOUT THE UNIVERSITY OF OTTAWA

Recognized as a world leader in photonics, the University of Ottawa offers a highly creative multidisciplinary environment for research and innovation, and is ranked amongst the top 10 research institutions. It was also recently ranked the "top tech center in Canada" in terms of current activity and future prospects.

The University of Ottawa and the Computational Nanophotonics Lab are committed to fostering diversity as a source of excellence and strength. We welcome applications from those who would contribute further to diversity, including (but not limited to): women, First Nations, Inuit and Métis peoples, persons with disabilities, members of visible minorities and persons of any sexual orientation, gender identity and/or expression.