

## **Postdoctoral Position in Light-Forces-Based and Nonlinear Silicon Nanophotonics and Nanooptomechanics**

A post-doctoral position is available, effective immediately, in the exciting new field of chip-scale silicon nano-optomechanics, at the interface of silicon nanophotonics and nanoelectromechanical systems (NEMS), and their interaction through light forces/radiation pressure at the nanoscale. You will take a leadership role in a major effort, funded by The David & Lucile Packard Foundation, to bring about breakthrough photonic device technology that exploits optical forces on the nanoscale to bring about unique functionality and new levels of performance in certain applications. Specifically, we are using light forces to create silicon photonic devices that are self-adaptive, and have unique nonlinear dynamics properties that may lead to novel nanoscale motors and photonic signal processing concepts. You will also gain familiarity with advanced CMOS electronics processes, in which our group has recently demonstrated the first monolithically integrated photonics in sub-100nm CMOS technology. The successful candidate will have a strong foundation in at least a few of: integrated silicon photonics theory, simulation and design; experimental device characterization; nanofabrication including e-beam lithography; NEMS/nanomechanics; phononics; and a strong background in electrodynamics and quantum mechanics.

University of Colorado Boulder is host to a very active research environment in optics and photonics, including over 40 research groups on campus, 4 national labs in the area that do photonics-related research, and 4 optics-related Nobel Prizes in the past decade. Postdocs are considered research faculty and receive generous benefits.

For more information or to express interest in a position, please see our webpage <http://plab.colorado.edu> and contact Prof. Milos Popovic by email: [milos.popovic@colorado.edu](mailto:milos.popovic@colorado.edu) (to have the application seen faster, please put [NOM] at the start of the subject line).