

Toyoko Orimoto
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Biography:

I have been a member of the CMS Collaboration since 2006, when I joined as the Robert A. Millikan Fellow of Experimental Physics at the California Institute of Technology. In 2009, I was awarded a CERN fellowship and since 2012, I have been an assistant professor of physics at Northeastern University, where I have continued my work on CMS and was recently awarded a DOE Early Career Award. Since joining CMS, I have been dedicated to the commissioning, calibration, and operation of the CMS electromagnetic calorimeter. In 2009, I received the CMS Achievement Award for “decisive leadership in ECAL prompt feedback group”, and I am the (incumbent) ECAL Editorial Board chair. Drawing upon the strength of the ECAL, my work in physics analysis has been focused on channels with photon final states and has spanned many physics groups—QCD, Exotica, SUSY, and Higgs. Prior to working on CMS, I received my Ph.D. from the University of California, Berkeley, where I studied rare B -decays related to the measurement of the CKM angle β with the Babar Experiment and worked on beam instrumentation for the International Linear.

More information, including my CV, can be found at:

<http://www.northeastern.edu/physics/people/faculty/toyoko-orimoto/>

Statement:

The discovery of the Higgs boson has presented us with a unique and very critical juncture for our field, both immediate and long-term. I believe that the USLUO and Executive Committee will continue to be an integral part of this journey through its dialogue with the public, as well as CERN and the broader physics community. Working on R&D for the ILC as a graduate student gave me a global perspective on the present and future of high energy physics. I learned very early on in my career the importance of not only preparing for discoveries at current facilities, but also planning for the future of our field.

As a postdoc, I spent 6 years based at CERN and experienced first hand the struggles of being a newcomer and young postdoc abroad, as well as the excitement of commissioning and our first discovery. In addition, I recently went through the difficult process of applying for faculty jobs, and I believe that USLUO can play an important part in promoting the careers of younger physicists, both inside and outside our field.

Lastly, I am devoted to communicating the importance of and our enthusiasm for scientific research to our funding agencies and Congress, as well as to the general public. I am particularly dedicated to reaching out to aspiring young physicists, particularly women and under-represented minorities. Recently, I presented a [TEDx](#) talk about the beauty of our research, have participated in the Adopt-A-Physicist program and am serving as the advisor to our local Society of Physics Students group.