

Closeout Summary for LoopFest XIV and RADCOR 2015

These funds were used in support of two conferences: RADCOR2015 (the 12th International Symposium on Radiative Corrections “Application of Quantum Field Theory to Phenomenology”) and LoopFest XIV (Radiative Corrections for the LHC and Future Colliders). The two conferences were merged and took place in Los Angeles at the UCLA Physics and Astronomy Department on June 15–19, 2015. The \$6,000 allocation was used to pay for the conference proceedings which are located <https://pos.sissa.it/235/>. The conference is also documented at <https://hepconf.physics.ucla.edu/radcor-loopfest/>.

RADCOR has been the main international conference on radiative corrections in quantum field theory and their application to particle phenomenology. LoopFest is a yearly series of workshops which started in 2002. These conferences have been a crucial component of providing theoretical support to the experimental program at particle colliders and we are grateful for the support. There were approximately 100 talks covering a range of topics of interest in high-energy particle physics, especially for collider physics. These topics included, (a) calculations of direct and immediate relevance for experimental studies at high-energy particle colliders, (b) the potential of the Large Hadron Collider and future experiments for precision measurements, (c) progress in multiloop and multileg calculations, (d) interfacing fixed-order higher-order calculations with multi-purpose event generators, (e) application of effective field theory techniques to precision calculations for collider observables and (f) formal aspects of scattering amplitudes. In addition there were presentations from CMS and ATLAS.