The 14th Kavli Asian Winter School on   December 10, 2019
Strings, Particles and Cosmology
Tohoku University

Dear Sir or Madam,

Here are my title and abstract for the Gong Show/Poster presentation:

o Title: **Leading order cross-sections and gauge boson polarization fractions in WZ production at the LHC in the Standard Model.**

o Speaker/Presenter: NGUYEN Tran Quang Thong.

o Affiliation:
  - Institute For Interdisciplinary Research in Science and Education (IFIRSE), ICISE, Quy Nhon, Vietnam.
  - Vietnam National University, University of Science, Ho Chi Minh City, Vietnam.

o Abstract: In this report, based on the Standard Model and Monte-Carlo method, I calculate the scattering $pp \longrightarrow WZ \longrightarrow 4$ leptons$+X$ at leading order. I present some results like the fiducial cross-section and kinematical distributions. Motivated by the recent ATLAS measurements for the W and Z polarization fractions in WZ production, I calculate also polarization fractions related to those gauge bosons. Comparisons between the results of my self-made C++ Monte-Carlo code and those of the MadGraph program will also be presented.

Yours faithfully,

Nguyen Tran Quang Thong

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