

Sung-Wong Lee, Ph.D
Professor and Chair
Department of Physics and Astronomy
Texas Tech University

Dear Dr. Lee and all members of the searching committee.

Thank you for allowing me to present myself as a candidate for the Assistant professor tenure-track position in the Department of Physics and Astronomy, a prospect about which I am very excited. I finished my PhD in Fundamental Physics at Universidad de Los Andes in Mérida – Venezuela in September 2012. The focus of my dissertation was Complex Systems (Social and Economy related models), Complex Networks and Coevolving Systems. Additionally, from December 2012 to December 2013 I earned a postdoctoral appointment at University of Texas at Austin, position that I complemented returning as a Research Scholar from January 2016 until May 2017. During these two periods my research focused on spreading of epidemic diseases on complex networks. Currently, I hold a postdoctoral researcher position at ICTP - SAIFR in Sao Paulo - Brazil; position that will end in May 2019.

As a researcher I have had the opportunity to work in different areas which have involved, but were not limited to: Network Theory (characterization and analysis of real world networks); Sociophysics (opinion formation models, culture dissemination, voter model, threshold models, community structure emergence); Econophysics (stratified model of economic exchange on networks); Disease propagation on networks (surveillance strategies, vaccination strategies based on information feedback, flu-like diseases, vector-borne diseases); analysis of time series (diseases, seismic, electroencephalograms, etc). I also have experience working with C language, R and shell bash. In my current position I have the opportunity to work in a free environment, which has given me access to multiple collaborations with researchers from different parts of the world and in areas diverse areas such as speech characterization and performance in sports - particularly soccer.

As for my academic responsibilities, I was part of the faculty of the Engineering Department at Universidad de Los Andes (ULA) in Merida – Venezuela, from January of 2008 to June 2017. I had to leave this position, due to the economic, social and political crisis all academics are facing in the country. ULA is the top university in Venezuela and as such, I had the opportunity to teach undergraduate students from the first semesters of the engineering career, that come from very diverse social and cultural environments. I also coordinated and co-founded the Multidisciplinary Mathematics Group, integrated by the faculty of the Calculus Department, along with collaborators that work in various fields such as Chemical Engineering, Systems Engineering, Physics and Mathematics.

I think that my interdisciplinary background would be an interesting addition to your already interdisciplinary institute. I would welcome the opportunity to talk to you in a video - conference if necessary. I look forward to hearing from you soon.

Sincerely,

Jose Luis Herrera