BEYOND THE VEIL OF EXTRA DIMENSIONS. Desmond Villalba, Dept. of Chemistry and Physics, University of Mary Washington. The Standard Model (SM) of Particle Physics is the prevailing description of interactions between matter at the most fundamental level. For the last several decades it has withstood the tests of numerous experiments and is the most precisely tested model across all science to date. Many questions still remained un-answered by the SM, such as what is Dark Matter?, why are neutrinos weird?, what’s the deal with more matter than anti-matter?, and more. Extending the SM is the job of modern theorists in this field as we attempt to wrangle with Nature’s secrets of the fundamental unknowns. This talk will focus on the possibility of extra-dimensions: what are they?, how can it help answer some of the SM deficiencies?, and what is the experimental evidence? Author contact: dvillalb@umw.edu