Cra. 19 # 63-27, Bogotá, Colombia

September 14, 2018

Random Physical Systems Mathematical Physics Month in Chile, 2018

Dear Members of the Organizing Committee,

I would be very honored to be a part of this conference. Not only is this an amazing opportunity to learn more about the complex world of random systems, but it is also an opportunity to meet new people and create powerful research links across the continent. Indeed, I am not only excited by the scheduled mini courses and talks, but also by the opportunity of discussing science with my fellow peers and learning as much as I can from them.

My research interests are based around the application of algebraic techniques to various problems in physics. I first became interested in this subject because of my disappointment at the usual undergraduate treatment of statistical mechanics. By translating most of the subject to the language of measure theory my mind was at ease. When studying the theory of quantum statistical mechanics the need for a noncommutative version of measure theory immediately led me to my current research. In particular, it has become clear to me that the language of operator algebras is a powerful setting to exhibit in a rigorous fashion both statistical and quantum field theories. This is why I humbly believe I may be able to provide something useful to the conference and my peers.

Cordially,

Iván Mauricio Burbano Aldana