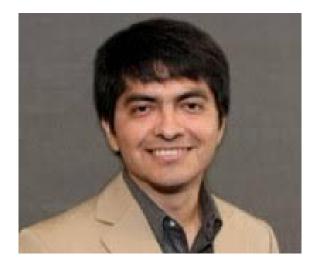


Seminar Title

"Order Series"

Speaker: Dr. Eric Dolores Cuenca (Yonsei University, Seoul, South Korea)



Date/Time: Monday October 24, 2022

4:00 PM - 5:00 PM

Abstract

To every poset X, Stanley considered the problem of counting the number $\Omega(X,n)$, $\Omega(X,n)0$ of strict and nonstrict order preserving maps from the poset X to the chain <n>=1<2<...<n. He showed that these are given by polynomials in n. Consider the operad of posets, it contains a suboperad of series parallel posets that is generated by the chain 1<2 and the disjoint union 1U1. We introduce an algebra of series parallel posets whose objects are the generating functions $\Omega(X,1)0 \times \Omega(X,2)0 \times 2+...$ We will discuss how this family inherits the algebraic properties of posets.