

abstract

LIE GROUPS, REPRESENTATIONS AND DISCRETE MATH

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We provide calculations of growth and spectra of Cayley and Schreier graphs related to some branch groups. Among the examples, we present a class of groups of intermediate growth defined by primitive polynomials over finite fields (the original Grigorchuk example fits in this setting as the group corresponding to the unique primitive polynomial x^2+x+1 over $\text{GF}(2)$) and the Hanoi Towers group on 3 pegs. In each case, the spectrum can be described as closure of an inverse orbit of a quadratic polynomial (thus having the Julia set of the quadratic polynomial as the set of accumulation points). Time permitting, relations to iterated monodromy groups will be indicated.