

**Meeting:** 1003, Atlanta, Georgia, MAA IPS Z1, MAA Invited Paper Session on Symmetry in Analysis

1003-Z1-65            **Kang-Tae Kim\*** (kimkt@postech.ac.kr), Department of Mathematics, Postech, 790-784  
Pohang City, South Korea. *One-parameter subgroup arising from a discrete non-compact  
automorphism group of a domain.*

Let  $\Omega$  be a domain with a smooth boundary in the complex plane. Assume also that there is a point  $p$  in  $\Omega$  and a sequence of holomorphic automorphisms  $f_j$  of  $\Omega$  such that the point sequence  $f_j(p)$  accumulates at a boundary point of  $\Omega$ . Then the primary goal of this presentation is to explain how this gives rise to a one-parameter subgroup of the automorphism group of the domain  $\Omega$ . This method as well as its consequences naturally generalize to a broad class of domains with higher complex dimensions. Certain recent results in complex dimension 2 will be also mentioned. (Received July 29, 2004)