GENERIC ANALYTIC POLYHEDRA IN $\mathbb{C}^2$ WITH NON-COMPACT AUTOMORPHISM GROUP

KANG-TAE KIM (POSTECH, POHANG, KOREA)

ABSTRACT. A generic analytic polyhedron in $\mathbb{C}^2$ is a bounded domain bounded by finitely many smooth Levi flat hypersurfaces that cross others complex-transversally. Very few of such domains possess non-compact holomorphic automorphism group. I will present in the lecture the theorem that says: such domains are in fact biholomorphic to the product of the unit open disc and a quotient of a hyperbolic Riemann surface. This is based upon my paper in collaboration with S.G. Krantz and A.F. Spiro, published in J. Reine u. Angew. Math. (2005).