Complex-hyperbolic Kleinian groups of large critical exponents

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A Kleinian group is a discrete isometry subgroup of hyperbolic spaces and the critical exponent is one important group invariant of Kleinian groups. It is a long-term question of whether there is a gap in the value of the critical exponent in complex hyperbolic spaces. We use complex hyperbolic surfaces constructed by Deligne-Mostow to prove that there is no gap in the values of critical exponents for the complex-hyperbolic Kleinian group.
(joint work with Subhadip Dey)