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**Tushar Das\*** ([tushardas.math@gmail.com](mailto:tushardas.math@gmail.com)). *Rigidity in infinite-dimensional hyperbolic spaces.*

We develop the theory of discrete groups acting by hyperbolic isometries on the open unit ball of an infinite-dimensional separable Hilbert space. We build appropriate analogs of thermodynamic formalism, ergodic theory and geometric measure theory to study the geometry of limit sets at the sphere at infinity.

We describe finitely and infinitely-generated classical Schottky groups which provide a rich abundance of examples that distinguish between finite and infinite-dimensional phenomena and present Sullivan-type rigidity for a large class of Schottky groups.

This is joint work with Bernd Stratmann (Bremen) and Mariusz Urbanski (UNT) (Received December 10, 2011)