Counterexample of normability in Hardy spaces H^p, $0 < p < 1$

Iván Jiménez Sánchez
Universidad Autónoma de Madrid, Spain

Abstract: It is well-known in the literature on Hardy spaces, that the Hardy spaces H^p, $0 < p < 1$ are not normable. However, none of the sources offer a proof of this fact. In 1953, Livingston published an article demonstrating this, using a convexity argument based on a theorem by Kolmogorov. In this talk, we will present a direct proof based on a counterexample of the non-normability of the Hardy spaces H^p, $0 < p < 1$.

This is a joint work with my thesis advisor Dragan Vukotić (Universidad Autónoma de Madrid).