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### **Hardy spaces associated with non-negative self-adjoint operators**

Maximal and atomic Hardy spaces  $H^p$  and  $H_A^p$ ,  $0 < p \leq 1$ , are considered in the setting of a doubling metric measure space in the presence of a non-negative self-adjoint operator whose heat kernel has Gaussian localization. It is shown that  $H^p = H_A^p$  with equivalent norms. Other characterizations of Hardy spaces in this setting will also be discussed.

Joint work with Shai Dekel, Gerard Kerkyacharian, and George Kyriazis.