Let $M$ be the quotient of the $(2n + 1)$-dimensional Heisenberg group by a discrete co-compact subgroup; thus $M$ is a strongly pseudoconvex compact CR manifold. We answer the following questions: (1) What are the eigenforms and eigenvalues of the Kohn Laplacians on $M$? (2) How can $M$ be realized as the boundary of a bounded domain in a complex manifold? The answer to (1) plays a role in the answer to (2), which reveals an interesting connection with the theory of Abelian varieties.

For more information about this seminar, visit the DG/PDE Seminar Web page (from the Math Department home page, www.math.washington.edu, follow the link Seminars, Colloquia, and Conferences).

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