1067-46-2042 Steve Avsec* (savsec2@illinois.edu). Hardy spaces associated with semigroups of operators. I shall introduce Hardy spaces associated to self-adjoint, completely positive operators on von Neumann algebras. The motivation of our research is to understand the boundedness of fourier multipliers on noncommutative L_p spaces. This talk is based on joint work with M. Junge and T. Mei. (Received September 22, 2010)