1019-46-33        **Robert T. Powers** and **Geoffrey L. Price\*** (`glp@usna.edu`), Department of Mathematics 9E,
United States Naval Academy, Annapolis, MD 21402. *$E_0$-semigroups induced from CP-flows.*

In a series of papers Robert Powers has developed a theory of $CP$-flows and their dilations to $E_0$-semigroups. Out of this work has emerged a wealth of examples of $E_0$-semigroups of type $II$ as well as a computable criterion for distinguishing cocycle classes of $E_0$-semigroups arising in this way. We discuss joint work with Powers in which we apply this theory to resolve a conjecture of his on the cocycle conjugacy classes of $E_0$-semigroups of type $II_0$. (Received July 26, 2006)