1044-47-29   **Peter G. Casazza*** (`pete@math.missouri.edu`), Department of Mathematics, University of Missouri, Columbia, MO 65211-4100. *The Kadison-Singer Problem in Mathematics and Engineering.*

We will see that the famous, intractable 1959 Kadison-Singer Problem in C*-algebras is equivalent to fundamental unsolved problems in a dozen areas of research in pure mathematics, applied mathematics and engineering. This gives all these research areas common ground on which to interact as well as explaining why each of them has volumes of literature on their respective problems without a satisfactory resolution. (Received July 07, 2008)