V. S. Varadarajan* (vsv@math.ucla.edu), Dept of Mathematics, UCLA, Los Angeles, CA 90095-1555, Los Angeles, CA 90095-1555. Representations of locally compact groups and homogeneous spaces

This is a restrospective view of the work of George Mackey and the impact of his themes—systems of imprimitivity, induced representations, ergodic theory, projective representations, Borel cohomology, etc.—and their impact on the mathematics of his time, and ours. I shall also speak of new applications of his ideas, such as in the theory of unitary representations of super Lie groups. I shall also discuss his famous work on the impossibility of a hidden variable explanation for quantum mechanics, namely the circle of ideas involving the Mackey-Gleason theorem.

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