

Operator Theory

V. B. Kiran Kumar's research interests include spectral approximation problems, non-commutative Korovkin-type theorems, Borg-type theorems, applications of preconditioning techniques, and symplectic spectral theory.

Recently, he started working in the area, symplectic spectral theory. This includes investigating the symplectic spectral approximation problems and an infinite-dimensional analogue of various inequalities concerning symplectic eigenvalues of finite-dimensional matrices. These results have direct applications to infinite-mode Gaussian covariance operators.