DAVID SHERMAN, University of California, Santa Barbara
Some aspects of operator theory in von Neumann algebras

Operator theory studies elements of $B(H)$; what happens when $B(H)$ is replaced with a different von Neumann algebra? Some theorems still work, others do not, and both outcomes can reveal interesting phenomena. In this talk I will discuss results concerning approximate equivalence, essential spectra, and subnormal operators. The springboard is a simple description, in terms of spectral measures, of the norm and strong* closures of the unitary orbit of a normal operator in a von Neumann algebra.