ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

8. Analysis

1991 MS Classification: 46B28, 46B40, 46L89, 47D15, 47D20
Werner, Wend, Universität Paderborn
Operator Systems without Unit
The Gelfand-Naimark theorem abstractly characterizes closed, *-invariant subalgebras of $L(H)$. An analogous result for subspaces of $L(H)$ that are *-invariant and contain the identity operator is due to Choi and Effros.

In this talk, we discuss the case in which the assumption on the identity in the Choi-Effros result has been dropped. We furthermore sketch the duality theory that goes with this new class of spaces and show how Hilbert space fits into this setting.