

1063-94-59

Yuichiro Kakihara* (ykakihar@csusb.edu), 5500 University Parkway, San Bernardino, CA 92407. *Information channels and channel operators*. Preliminary report.

Define the pointwise weak* topology on the set \mathcal{O} of all channel operators with some input and output. The set \mathcal{C} of all information channels is regarded as a subset of \mathcal{O} . Then, an approximation of an operator in \mathcal{O} by a sequence of channels in \mathcal{C} with respect to the pointwise weak* topology is considered. (Received August 01, 2010)