

Abstract

We apply the notion of Banach space operator ideals in nuclear spaces through topological vector spaces. The motivation for this study came from attempts to generalize the structure of nuclear spaces as a result of nuclear maps from functional analysis context. The compact closed structure associated with the category of relations results to nuclear ideals. Basic properties of Banach space operator ideals in relation to the structure of nuclear spaces will be demonstrated. We therefore establish a close correspondence between Banach space operator ideals and nuclear ideals through topological vector spaces