Contribution Title:	SPECTRAL CONDITIONS FOR POSTIVE MAPS IN MATRIX ALGEBRAS
Authors:	D. Chruscinski
Presenting author:	Chruscinski D.
Affilation:	Nicolaus Copernicus University
E-mail:	darch@fizyka.umk.pl
Invited speaker:	
YRS seminar:	NO

We provide partial classification of positive linear maps in matrix algebras which is based on a family of spectral conditions. This construction generalizes the celebrated Choi example of a map which is positive but not completely positive. It is shown how the spectral conditions enable one to construct linear maps on tensor products of matrix algebras which are positive but only on a convex subset of separable elements. Such maps provide basic tools to study quantum entanglement in multipartite systems.