Vjekoslav Kovač: UMD-spaces

Over the time one class of Banach spaces proved to be the most natural one for vector-valued generalizations of various problems in probability and mathematical analysis, especially for martingale estimates, unconditional properties of wavelet bases, and boundedness of singular integrals. The name "UMD spaces" is an abbreviation for "unconditional martingale differences". We will show equivalences of several different definitions of these spaces and mention new results and open questions related to mutual dependence of definition constants.