1065-47-206 **Malgorzata Marta Czerwinska*** (mmczrwns@memphis.edu). *Complex uniform rotundity in symmetric spaces of measurable operators.*

We say that a Banach space $(X, \|\cdot\|)$ is *complex uniformly rotund* if for any $\epsilon > 0$ there exists $\delta(\epsilon) \in (0,1)$ such that

$$\sup_{|\lambda| \leqslant 1} \|x + \lambda y\| \geqslant 1 + \delta(\epsilon) \text{ whenever } \|y\| \geqslant \epsilon \text{ and } \|x\| = 1.$$

Let $\mathcal{M}$ be a semifinite von Neumann algebra with a faithful, normal, semifinite trace $\tau$, and $E$ be a symmetric Banach function space on $[0, \tau(\mathbf{1}))$. The symmetric spaces $E(\mathcal{M}, \tau)$ consists of all $\tau$-measurable operators $x$ for which the singular value function $\mu(x)$ belongs to $E$ and is equipped with the norm $\|x\|_{E(\mathcal{M},\tau)} = \|\mu(x)\|_E$.

We show that the symmetric space $E(\mathcal{M}, \tau)$ is complex uniformly rotund if and only if $E$ is complex uniformly rotund. (Received September 13, 2010)