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**Malgorzata Marta Czerwinska\***, m.czerwinska@unf.edu, and **Anna Kaminska**,  
kaminska@memphis.edu. *Banach envelopes in symmetric spaces of measurable operators.*

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

We show that the Banach envelope  $E(\mathcal{M}, \tau)^\wedge$  of  $E(\mathcal{M}, \tau)$  is equal to  $\widehat{E}(\mathcal{M}, \tau)$ , where  $\widehat{E}$  is a Banach envelope of a quasi-normed symmetric function space  $E$ . The analogous result follows for the unitary matrix spaces. It is a joint work with Anna Kamińska from the University of Memphis. (Received August 13, 2015)