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USA *Daugavet property and vector-valued  $L_p$ -  
spaces.*

ABSTRACT. Recall that a Banach space  $X$  has the *Daugavet property* for a class  $\mathcal{M}$  of bounded operators if the identity  $\|I + T\| = 1 + \|T\|$  holds for all  $T \in \mathcal{M}$ . In the case the identity is true only for operators  $T \in \mathcal{M}$  satisfying  $\|T\| \in \sigma(T)$ , it is customary to say that the space  $X$  has the *anti-Daugavet property* for  $\mathcal{M}$ . It is known that if the space  $X$  has the Daugavet property for all rank-1 operators, then  $X$  has the Daugavet property for all weakly compact operators. We have shown that for the anti-Daugavet property a similar fact is not true. The proof depends on the possibility to extend some geometric properties from a Banach space  $X$  to the Lebesgue-Bochner space  $L_p(\mu, X)$ . Nevertheless a significant part of the implication in the question remains true, namely, the anti-Daugavet property for rank-1 operators implies the anti-Daugavet property for compact operators.