Hindawi Publishing Corporation
Journal of Applied Mathematics
Volume 2013, Article ID 826397, 1 page
http://dx.doi.org/10.1155/2013/826397

Erratum

Erratum to "Ranks of a Constrained Hermitian Matrix Expression with Applications"

Shao-Wen Yu

Department of Mathematics, East China University of Science and Technology, Shanghai 200237, China

Correspondence should be addressed to Shao-Wen Yu; yushaowen@ecust.edu.cn

Received 14 June 2013; Accepted 8 July 2013

The equalities (15) and (16) should be deleted from Lemma 3 which will be reformatted as follows.

Lemma 3. *Let $A = A^* \in \mathbb{H}^{m\times m}$, $B \in \mathbb{H}^{m\times n}$, and $C \in \mathbb{H}^{p\times m}$ be given. Assume that $\mathscr{R}(B) \subseteq \mathscr{R}(C^*)$. Then,*

$$\begin{aligned}
&\max_X r\left[A - BXC - (BXC)^*\right] \\
&\qquad = \min\left\{ r\begin{bmatrix} A & C^* \end{bmatrix}, r\begin{bmatrix} A & B \\ B^* & 0 \end{bmatrix} \right\}, \\
&\min_X r\left[A - BXC - (BXC)^*\right] \\
&\qquad = 2r\begin{bmatrix} A & C^* \end{bmatrix} + r\begin{bmatrix} A & B \\ B^* & 0 \end{bmatrix} - 2r\begin{bmatrix} A & B \\ C & 0 \end{bmatrix}.
\end{aligned} \tag{17}$$