

## General Hermite and Laguerre two-dimensional polynomials

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## Corrigenda

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By comparing formula (5.5) with formula (A.4) in appendix A, a difference in the order of indices  $V'_{xy}$  in (5.5) with the corresponding  $V'_{21}$  in (A.4) was overlooked. This has an influence on the orthogonality and completeness relations of the Hermite 2D functions which possess the following correct form with an additional transposition (notation  $^T$ ) of  $U^{-1}$ :

$$\int dx \wedge dy h_{k,l}((U^{-1})^T; x, y) h_{m,n}(U; x, y) = \delta_{k,m} \delta_{l,n}$$
$$\sum_{m=0}^{\infty} \sum_{n=0}^{\infty} h_{m,n}(U; x, y) h_{m,n}((U^{-1})^T; x', y') = \delta(x - x') \delta(y - y')$$

and analogously for the Laguerre 2D functions by substitution  $U^{-1} \rightarrow (U^{-1})^T$ , where  $(U^{-1})^T = (U^T)^{-1}$  is the contragredient matrix to  $U$ . In order to get full compatibility with appendix A, one may substitute in section 5 matrix  $V$  by its transposed  $V^T$ ; i.e.  $V \rightarrow V^T$ ,  $V_{xy} \leftrightarrow V_{yx}$  and  $V_{zz^*} \leftrightarrow V_{z^*z}$ .