COMMENTS ON:
THE ALGEBRA AND GEOMETRY OF STEINER AND OTHER QUADRATICALLY PARAMETRIZABLE SURFACES

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1. ERRATA

The following typos appear in the published paper, [CSS].

• (p. 270) The derivative, equation (34), should read

\[
\frac{\partial f_3}{\partial x} = [x_2(x_3^2 + x_4^2) - 2x_1x_3^2, x_1(x_3^2 + x_4^2), 2x_1x_2x_3 - 4x_3(x_3^2 + x_4^2), 2x_1x_2x_4 - 2x_1^2x_4 - 4(x_3^2 + x_4^2)x_4].
\]

This corrects the lower right 2 × 2 block of the Hessian, equation (35), to

\[
\begin{pmatrix}
2x_1x_2 - 12x_3^2 - 4x_4^2 & -8x_3x_4 \\
-8x_3x_4 & 2x_1x_2 - 2x_1^2 - 12x_4^2 - 4x_3^2
\end{pmatrix}.
\]

• (p. 273) Below equation (58) should read “As in the case of Σ_7 and Σ_8”

• (p. 279) Theorem 7. should read “The order of Σ is 4 − ν_Σ.”

• (p. 281) Above equation (105) should read “Since P(Σ) ⊄ M_2, e ≠ 0.”

• (p. 284) Step (2) in Section 6. should read “det{λM + μN}.”

2. UPDATES

The references mention unpublished notes of A. Schwartz and C. Stanton — a version from 1988 is available from me, on request. Another pre-1996 source on this topic, with some details on the matrix calculations leading to the classification theorem, is [C1], which I made available online in 2018.

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Since publication, the following related article has come to our attention: [D]. The topic of projections of the real Veronese variety has more recently been considered in [C3]. Also see my web page on Steiner surfaces, currently at this address: [C2].

3. CITATIONS

Our article is cited in these academic papers: [A1], [A2], [A3], [ABB], [AMT], [AS1], [AS2], [BJKL], [BCF], [BEG], [CFRV], [EGL1], [EGL2], [GS], [G], [HJS], [H], [HW1], [HK], [HW2], [HW3], [LG], [PA], [PO], [POS], [PR], [PT], [P], [RJ], [S], [SPS], [WG], [WC], [WCD], [Zanella], [Z1], [Z2], [Z3], as well as these books: [F], [KI], and this computer technical manual: [T].


COMMENTS ON STEINER SURFACES


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