

**Concrete use of the joint coordinate system
for the quantification of articular rotations
in the digital joints of the horse**

Christophe DEGUEURCE^{a*}, Henry CHATEAU^a,
Viviane PASQUI-BOUTARD^b, Philippe POURCELOT^a, Fabrice AUDIGIÉ^a,
Nathalie CREVIER-DENOIX^a, Hassen JERBI^a, Didier GEIGER^c,
Jean-Marie DENOIX^a

^aUMR INRA-DGER Biomécanique du Cheval, École Nationale Vétérinaire d'Alfort,
94704 Maisons-Alfort Cedex, France

^bLaboratoire de Robotique de Paris, Université Versailles-Saint Quentin en Yvelines,
78140 Vélizy, France

^cLaboratoire de Mécanique Physique, CNRS UPRES-A 7052, Université Paris XII Val de Marne,
94000 Créteil, France

In page 303, the global matrix should read:

$$\mathbf{M}_{d/p} = \begin{bmatrix} \mathbf{x}_1^d/N_1^d & \mathbf{y}_1^d/N_1^d & \mathbf{z}_1^d/N_1^d \\ \mathbf{x}_2^d/N_2^d & \mathbf{y}_2^d/N_2^d & \mathbf{z}_2^d/N_2^d \\ \mathbf{x}_3^d/N_3^d & \mathbf{y}_3^d/N_3^d & \mathbf{z}_3^d/N_3^d \end{bmatrix} \cdot \begin{bmatrix} \mathbf{x}_1^p/N_1^p & \mathbf{x}_2^p/N_2^p & \mathbf{x}_3^p/N_3^p \\ \mathbf{y}_1^p/N_1^p & \mathbf{y}_2^p/N_2^p & \mathbf{y}_3^p/N_3^p \\ \mathbf{z}_1^p/N_1^p & \mathbf{z}_2^p/N_2^p & \mathbf{z}_3^p/N_3^p \end{bmatrix} = \begin{bmatrix} \mathbf{r}_{11} & \mathbf{r}_{12} & \mathbf{r}_{13} \\ \mathbf{r}_{21} & \mathbf{r}_{22} & \mathbf{r}_{23} \\ \mathbf{r}_{31} & \mathbf{r}_{32} & \mathbf{r}_{33} \end{bmatrix}.$$

In page 304, Section 2.2.2.3, the elementary angles should read:

$$\theta_1 = -\operatorname{atan} \frac{\mathbf{r}_{13}}{\mathbf{r}_{33}}, \theta_2 = \operatorname{asin} \mathbf{r}_{23}, \theta_3 = -\operatorname{atan} \frac{\mathbf{r}_{21}}{\mathbf{r}_{22}}.$$