

Éléments de Géométrie Riemannienne Infinitésimale

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— — — — —
—

k

br

p

k

$\frac{1}{r}$

$\leq r \leq$

4

3

3 3

3 3

$\frac{\pm}{\parallel \parallel}$

→

'
3
3

×

É

b

br

P p
C
O

P
h

M f

h ' g
F

Q

3

4

C 3

∈ C

3

3 3

$$\begin{aligned} / & \quad \left(- \right) - \\ 3/ & \quad \left(\frac{3}{-} \right) - \chi \quad \chi \end{aligned}$$

$$\vec{r} \quad \vec{r} \ s$$

s

$$\frac{d \vec{r}}{ds} \quad \frac{d \vec{r}}{ds} \quad \frac{d \vec{r}}{ds}$$

$$\left\{ \begin{array}{l} \vec{r} \ s \quad \vec{r} \ s \quad \tau \ \vec{r} \ s \\ \vec{r} \ s \quad \vec{r} \ s \end{array} \right\}$$

$$\left\{ \begin{array}{l} \frac{d \vec{r}}{ds} \quad s \ \vec{r} \\ \frac{d \vec{r}}{ds} \quad s \ \vec{r} \quad s \ \vec{r}_3 \\ \frac{d \vec{r}}{ds} \quad s \ \vec{r} \quad s \ \vec{r} \\ \frac{d \vec{r}}{ds} \quad s \ \vec{r} \end{array} \right.$$

$$s \quad f \quad s \quad F$$

$$S \quad M \quad h \quad fi \quad h \quad f \quad , \quad g \quad C \quad C$$

$$S \quad > \quad hy \quad h \quad F \quad h$$

$$s \begin{pmatrix} - \\ - \\ - \end{pmatrix}$$

$$\vec{r} \cdot s \frac{d \vec{r}}{ds} \quad s \frac{d \vec{r}}{ds} \quad \frac{s}{!} \cdot \frac{d \vec{r}}{ds}$$

$$\frac{s}{!} \left[\frac{d \vec{r}}{ds} \quad s w s \right]$$

$$w s \quad \vec{r}$$

$$\frac{d \vec{r}}{ds} \quad \vec{r} \quad \frac{d \vec{r}}{ds} \quad \frac{d \vec{r}}{ds} \quad \vec{r}$$

$$\frac{d^3 \vec{r}}{ds^3} \quad \vec{r} \quad \vec{r} \quad \vec{r}_3 \quad \vec{r} \quad \vec{r} \quad \vec{r}_3$$

$$\frac{d \vec{r}}{ds} \quad \alpha, \vec{r} \quad \alpha, \vec{r} \quad \alpha, \tau \rightarrow \quad \vec{r}$$

$$\vec{r} \cdot s \quad s \left(\frac{-}{!} s \quad \frac{-}{!} \alpha \cdot s \right) \vec{r}$$

$$s \left(- \frac{-}{!} s \quad \alpha \cdot s \right) \vec{r}$$

$$\frac{s}{!} \quad \vec{r} \quad \frac{s}{!} w s$$

$$w s \quad w \vec{r} \quad w \vec{r} \quad w s$$

$$\beta \quad \frac{-}{!} s \quad \frac{-}{!} w s$$

$$\beta \quad \frac{-}{!} s \quad \frac{-}{!} w s$$

$$\vec{r}^s \quad s \quad \beta s \vec{r}^s \quad s \quad \left(- \quad \beta s \right) \vec{r}^s \quad s^3 \left(\frac{1}{1} \quad \beta_3 s \right) \vec{r}^s$$

$$s \left(\frac{1}{1} \quad w s \right) \vec{r}^s$$

T

$$\left\{ \vec{r}^s \quad \vec{r}^s \right\}$$

$$\frac{\beta s s}{- \frac{\beta s s}{\beta s}}$$

$$3 \quad \frac{\frac{3!}{-} \beta_3 s s}{\beta s}$$

$$\frac{\frac{1}{(-1)!} \beta s s}{\beta s}$$

\geq

$$- \quad \frac{- \beta s}{\beta s} \quad \left(- \right)^s -$$

$$\frac{3}{-} \quad \frac{\frac{3!}{-} \beta_3 s}{\beta s \beta s} \quad \left(\frac{-3}{-} \right) -$$

$$- \quad \frac{\frac{1}{(-1)!} \beta s}{\beta s \beta s}$$

$$\left(- \right) -$$

4

— —

4 C f

$$C \geq z f f$$

$$3 \quad 3 \quad 3 \quad 3 \quad f \quad 3 \quad 3 \quad 3 \quad 3 \quad f$$

$$r \frac{\partial f}{\partial} \quad s \frac{\partial f}{\partial \partial} \quad t \frac{\partial f}{\partial} \quad q \frac{\partial f}{\partial} \quad r \quad s \quad t$$

$$3 \quad 3 \quad 3 \quad 3 \quad 3 \quad 3 \quad q \quad 3 \quad 3 \quad r \quad 3 \quad 3 \quad 3 \quad 3 \quad s \quad 3 \quad 3 \quad t \quad q \quad q$$

$$3 \quad 3 \quad 3 \quad 3$$

z

z b c d z e z gz

$z \quad B \quad C$

$z \quad B \quad B \quad C$
 $3 \quad 3$

3 3

$\overline{B} \quad \overline{B \quad C} \quad z$
 z
 $\overline{B} \quad \overline{B \quad C}$

$B \quad C \quad B$

6

z
 $\theta \quad B \quad \theta \quad \theta \quad C \quad \theta$
 θ
 θ
 $B \quad \theta \quad C \quad \theta \quad \theta \quad B \quad \theta$

$S \quad g \quad , \quad f \quad S$
 $f \quad h$

Ex p

A k T
B k U W k T H B R

B bl g h

E ' g T

E ' fi k

fi g g y
U

B 6 S Th y A w h N S A y
77

k , g V ff

6 T g y

U T
B R