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Detection of collision events on curved trajectories: Optical information from invariant rate-of-bearing change

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(. .,

).

1,

2,

3,

EXPERIMENT 1
Linear and Circular Trajectories

1,

,

.

.

d′

,

(d′)

(1 0).

d′

.

(p <

.05)

2.0 3.25 .

,

.

Bias. β

4 ( ) × 2 ( )

. $F(3,21) = 0.$

$F(1,) = 0.\ 2)$

$(p > .05)$.

$F(3,21) = 2.1, p > .05$.

EXPERIMENT 2

1,

d′ ,
(1 0).
4.5- 5. 5- , -

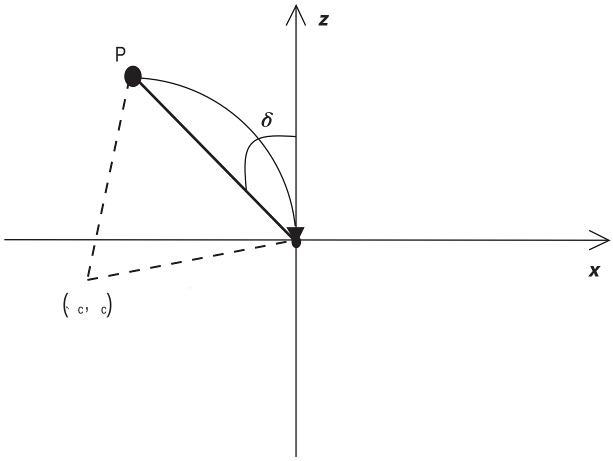
.

.
3.5- ,
( )
2, 3, , , , 110-, 225-, 255-, 315-, 410-,
550- . 2.0- ,
0, 0, 2, 5, , 110-, 225-, 255-,
315-, 410-, 550- , .

.

Bias. β
4 ( ) × ( )
. $F(3,21) = 4.$
($p < .05$). β

APPENDIX



, ( ) , ( ) ,

, ", , δ , ω

0 .

$$, =, + \cdot (\omega \cdot + {}_0) \quad (1)$$

$$, =, + \cdot (\omega \cdot + {}_0). \quad (2)$$

$$\delta = {}^{-1}\left(\frac{}{}\right). \quad (3)$$

$$\dot{\delta} = \frac{d}{d}\delta = \frac{d}{d}\left[{}^{-}\left(\frac{}{}\right)\right] = \frac{}{+} \cdot \frac{d}{d}\left(\frac{}{}\right),$$

APPENDIX (