INTERNATIONAL STANDARD

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Motorcycle and motorcycle-rider kinematics — Vocabulary

AMENDMENT 1

Cinématique relative au motocycle et à son conducteur — Vocabulaire AMENDEMENT 1



Reference number ISO 11838:1997/Amd.1:2011(E)

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Foreword

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Amendment 1 to ISO 11838:1997 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 22, *Motorcycles*.

Motorcycle and motorcycle-rider kinematics — Vocabulary

AMENDMENT 1

Page 2, 3.2.1

Replace 3.2.1 with the following:

3.2.1 steering velocity

angular velocity of the sprung part of the steering assembly about the z_f' -axis

Page 7, 5.2.7

Replace 5.2.7 with the following:

5.2.7

braking force

negative **tyre longitudinal force** (5.2.3) caused by the application of braking torque in the x_t -direction

Page 7, 5.2.8

Replace 5.2.8 with the following:

5.2.8

conicity force

tyre lateral force (5.2.2) which does not change sign [with respect to the **horizontal tyre axis system** (6.2.2)] with a change in direction of rotation when the **tyre slip angle** (5.1.5) and the **camber angle** (5.1.4) are zero

Page 7, 5.2.9

Replace 5.2.9 with the following:

5.2.9

plysteer force

tyre lateral force (5.2.2) which changes sign [with respect to the horizontal tyre axis system (6.2.2)] with a change in direction of rotation when the tyre slip angle (5.1.5) and the camber angle (5.1.4) are zero

ISO 11838:1997/Amd.1:2011(E)

Page 13, 6.7.6

Replace 6.7.6 with the following:

6.7.6

resultant roll angles

angles formed by the planes through either the $x_{\rm go}$ or $x_{\rm gg}$ or $x_{\rm ge}$ -axis and the motorcycle-rider combination's centre of gravity and the z -axis; these are called respectively conventional ($\Phi_{\rm go,res}$), geometrical ($arPhi_{
m gg,res}$) and effective ($arPhi_{
m ge,res}$) resultant roll angle

Page 14, 6.7.9.7

Replace 6.7.9.7 with the following:

6.7.9.7 roll velocity bank velocity angular velocity about the x'-axis

Page 14, 6.7.9.7.1

Replace 6.7.9.7.1 with the following:

6.7.9.7.1 conventional roll velocity angular velocity about the x_{go} -axis

Page 14, 6.7.9.7.2

Replace 6.7.9.7.2 with the following:

6.7.9.7.2 geometrical roll velocity angular velocity about the x_{gg} -axis

Page 14, 6.7.9.7.3

Replace 6.7.9.7.3 with the following:

6.7.9.7.3 effective roll velocity angular velocity about the x_{qe} -axis

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