constant	unit	description
l_v	m	distance between S and the front axle (vehicle reference frame)
l_h	m	distance between S and the rear axle (vehicle reference frame)
h_S	m	height of S (ground reference frame)
m_vh	kg	wheel mass
m_S	kg	suspended mass
r	m	tyre outer radius
theta_vh	kg.m^2	tyre rolling inertia
theta_zz_vh	kg.m^2	tyre z inertia
u_x		tyre MF model
u_y		
c_x		
c_y		
b_x		
b_y		
e_z		
T_x		
T_y		
g	m/s^2	acceleration of gravity