

## Used symbols

$\cdot$	scalar product	$\times$	cross product
$\dot{x}$	time derivative of $x$	$V'$	space derivative of $V$
$\ell, d, s$	length / distance	$r$	radius
$A$	area	$S$	surface
$C$	curve		
$t$	time	$x, y, z, \vec{r}$	position
$v$	velocity	$a$	acceleration
$g$	Earth's gravity	$G$	gravitational constant
$\alpha, \phi, \vartheta$	angle	$\omega, \Omega$	angular velocity / frequency
$T$	time of circulation	$f$	frequency
$F$	force	$M$	moment of torque
$p$	momentum	$L$	angular momentum
$m$	mass	$\Theta$	moment of inertia
$\mathcal{M}$	total mass	$\rho$	density
$\vec{P}$	total momentum	$\vec{R}$	position of the center of mass
$\mu$	static friction coefficient	$\gamma$	Stokes friction coefficient
$D$	spring constant		
$W$	work	$E$	energy
$V$	mechanical potential	$Q$	lost energy
$\mathcal{A}$	amplitude	$\lambda$	damping factor / wave length
$c$	phase velocity		
$q, Q$	charge	$I$	current
$e$	elementary charge	$e$	Euler's constant
$\vec{E}$	electric field	$\vec{B}$	magnetic field
$\epsilon$	permittivity	$\mu$	permeability
$\phi$	electric potential	$\Phi$	magnetic flux
$n$	charge density	$j$	current density
$U$	voltage	$R, X$	resistance
$C$	capacity	$\mathcal{L}$	inductance
$\rho_s$	specific resistance	$\sigma$	surface charge density / conductivity
$\tau$	time between collisions	$P$	power
$N$	winding number	$Z$	impedance