T1 kinematics	T1 distance	T1 scalar
T1 displacement	T1 vector	T1 speed
T1 velocity	T1 acceleration	T1 average

T1

标量

biāo liàng

T1

路程

lù chéng

T1

运动学

yùn dòng xué

T1

速率

sù lǜ

T1

矢量

shǐ liàng

T1

位移

wèi yí

T1

平均

píng jūn

T1

加速度

jiā sù dù

T1

速度

sù dù

T1 instantaneous	T1 tangent	T1 uniform acceleration
T1 free fall	T1 projectile	T1 component
T1 trajectory	T1 time of flight	T1 range

T1

匀加速

yún jiā sù

T1

切线

qiē xiàn

T1

瞬时

shùn shí

T1

分量

fèn liàng

T1

抛体

pāo tǐ

T1

自由落体

zì yóu luò tǐ

T1

射程

shè chéng

T1

飞行时间

fēi xíng shí jiān

T1

轨迹

guǐ jì

T1 fluid resistance	T1 drag	T1 terminal speed
T2 force	T2 interaction	T2 inertia
T2 free-body diagram	T2 resultant force	T2 translational equilibrium

T1

终端速度

zhōng duān sù dù

T1

阻力

zǔ lì

T1

流体阻力

liú tǐ zǔ lì

T2

惯性

guàn xìng

T2

相互作用

xiāng hù zuò yòng

T2

力

lì

T2

平动平衡

píng dòng píng héng

T2

合力

hé lì

T2

受力图

shòu lì tú

T2 static friction	T2 dynamic friction	T2 spring constant
T2 Stokes' law	T2 viscosity	T2 buoyancy
T2 momentum	T2 conservation of momentum	T2 impulse

T2

劲度系数

jìn dù xì shù

T2

动摩擦力

dòng mó cā lì

T2

静摩擦力

jìng mó cā lì

T2

浮力

fú lì

T2

黏度

nián dù

T2

斯托克斯定律

sī tuō kè sī dìng lǜ

T2

冲量

chōng liàng

T2

动量守恒

dòng liàng shǒu héng

T2

动量

dòng liàng

T2 elastic collision	T2 inelastic collision	T2 explosion
T2 period	T2 angular velocity	T2 centripetal acceleration
T2 centripetal force	T3 conservation of energy	T3 work

T2

爆炸

bào zhà

T2

非弹性碰撞

fēi tán xìng pèng zhuàng

T2

弹性碰撞

tán xìng pèng zhuàng

T2

向心加速度

xiàng xīn jiā sù dù

T2

角速度

jiǎo sù dù

T2

周期

zhōu qī

T3

功

gōng

T3

能量守恒

néng liàng shǒu héng

T2

向心力

xiàng xīn lì

T3 mechanical energy	T3 kinetic energy	T3 gravitational potential energy
T3 elastic potential energy	T3 power	T3 efficiency
T3 Sankey diagram	T3 energy density	T4 molecular model

T3

重力势能

zhòng lì shì néng

T3

动能

dòng néng

T3

机械能

jī xiè néng

T3

效率

xiào lǜ

T3

功率

gōng lǜ

T3

弹性势能

tán xìng shì néng

T4

分子模型

fèn zǐ mó xíng

T3

能量密度

néng liàng mì dù

T3

桑基图

sāng jī tú

T4 density	T4 Celsius scale	T4 Kelvin scale
T4 absolute zero	T4 average kinetic energy	T4 Boltzmann constant
T4 internal energy	T4 thermal equilibrium	T4 specific heat capacity

T4

开尔文温标

kāi ěr wén wēn biāo

T4

摄氏温标

shè shì wēn biāo

T4

密度

mì dù

T4

玻尔兹曼常数

bō ěr zī màn cháng shù

T4

平均动能

píng jūn dòng néng

T4

绝对零度

jué duì líng dù

T4

比热容

bǐ rè róng

T4

热平衡

rè píng héng

T4

内能

nèi néng

T4 phase change	T4 melting	T4 freezing
T4 boiling	T4 condensing	T4 specific latent heat
T4 specific latent heat of fusion	T4 specific latent heat of vaporization	T4 evaporation

T4

凝固

níng gù

T4

熔化

róng huà

T4

相变

xiàng biàn

T4

比潜热

bǐ qián rè

T4

凝结

níng jié

T4

沸腾

fèi téng

T4

蒸发

zhēng fā

T4

汽化比潜热

qì huà bǐ qián rè

T4

熔化比潜热

róng huà bǐ qián rè

T4 conduction	T4 thermal conductivity	T4 temperature gradient
T4 convection	T4 convection current	T4 thermal radiation
T4 black body	T4 luminosity	T4 Stefan–Boltzmann constant

T4

温度梯度

wēn dù tī dù

T4

热导率

rè dǎo lǜ

T4

热传导

rè chuán dǎo

T4

热辐射

rè fú shè

T4

对流环流

duì liú huán liú

T4

对流

duì liú

T4

斯特藩玻尔兹曼常量

sī tè fān bō ěr zī màn cháng liàng

T4

光度

guāng dù

T4

黑体

hēi tǐ

T4 Wien's displacement law	T4 apparent brightness	T5 radiative equilibrium
T5 solar constant	T5 albedo	T5 emissivity
T5 greenhouse effect	T5 greenhouse gas	T5 photon

T5

辐射平衡

fú shè píng héng

T4

视亮度

shì liàng dù

T4

维恩位移定律

wéi ēn wèi yí dìng lǜ

T5

发射率

fā shè lǜ

T5

反照率

fǎn zhào lǜ

T5

太阳常数

tài yáng cháng shù

T5

光子

guāng zǐ

T5

温室气体

wēn shì qì tǐ

T5

温室效应

wēn shì xiào yìng

T5 natural frequency	T5 resonance	T5 enhanced greenhouse effect
T6 pressure	T6 amount of substance	T6 Avogadro constant
T6 molar mass	T6 absolute zero	T6 pressure–volume diagram

T5

增强温室效应

zēng qiáng wēn shì xiào yìng

T5

共振

gòng zhèn

T5

固有频率

gù yǒu pín lǜ

T6

阿伏伽德罗常数

ā fú jiā dé luó cháng shù

T6

物质的量

wù zhì dì liàng

T6

压强

yā qiáng

T6

压强体积图

yā qiáng tǐ jī tú

T6

绝对零度

jué duì líng dù

T6

摩尔质量

mó ěr zhì liàng

T6 isotherm	T6 molar gas constant	T6 ideal gas law
T6 ideal gas	T6 kinetic theory	T6 root mean square speed
T6 monatomic	T6 real gas	T7 electromotive force

T6

理想气体定律

lǐ xiǎng qì tǐ dìng lǜ

T6

摩尔气体常数

mó ěr qì tǐ cháng shù

T6

等温线

děng wēn xiàn

T6

方均根速率

fāng jūn gēn sù lǜ

T6

分子动理论

fèn zǐ dòng lǐ lùn

T6

理想气体

lǐ xiǎng qì tǐ

T7

电动势

diàn dòng shì

T6

实际气体

shí jì qì tǐ

T6

单原子

dān yuán zi

T7 chemical cell	T7 solar cell	T7 electric current
T7 charge carrier	T7 conductor	T7 insulator
T7 potential difference	T7 resistance	T7 resistivity

T7

电流

diàn liú

T7

太阳能电池

tài yáng néng diàn chí

T7

化学电池

huà xué diàn chí

T7

绝缘体

jué yuán tǐ

T7

导体

dǎo tǐ

T7

载流子

zài liú zǐ

T7

电阻率

diàn zǔ lǜ

T7

电阻

diàn zǔ

T7

电势差

diàn shì chā

T7 Ohm's law	T7 ohmic	T7 filament lamp
T7 non-ohmic	T7 thermistor	T7 light-dependent resistor
T7 potentiometer	T7 internal resistance	T7 terminal potential difference

T7

白炽灯

bái chì dēng

T7

欧姆的

ōu mǔ de

T7

欧姆定律

ōu mǔ dìng lǜ

T7

光敏电阻

guāng mǐn diàn zǔ

T7

热敏电阻

rè mǐn diàn zǔ

T7

非欧姆的

fēi ōu mǔ de

T7

端电压

duān diàn yā

T7

内阻

nèi zǔ

T7

电位器

diàn wèi qì

T7 potential divider	T8 simple harmonic motion	T8 oscillation
T8 equilibrium position	T8 restoring force	T8 displacement
T8 angular frequency	T8 amplitude	T8 period

T8

振动

zhèn dòng

T8

简谐运动

jiǎn xié yùn dòng

T7

分压器

fēn yā qì

T8

位移

wèi yí

T8

回复力

huí fù lì

T8

平衡位置

píng héng wèi zhì

T8

周期

zhōu qī

T8

振幅

zhèn fú

T8

角频率

jiǎo pín lǜ

T8 frequency	T8 isochronous	T8 spring constant
T8 simple pendulum	T8 total energy	T8 damping
T9 travelling wave	T9 medium	T9 transverse wave

T8

劲度系数

jìn dù xì shù

T8

等时的

děng shí de

T8

频率

pín lǜ

T8

阻尼

zǔ ní

T8

总能量

zǒng néng liàng

T8

单摆

dān bǎi

T9

横波

héng bō

T9

介质

jiè zhì

T9

行波

xíng bō

T9 longitudinal wave	T9 compression	T9 rarefaction
T9 wavelength	T9 wave speed	T9 sound
T9 ultrasound	T9 electromagnetic wave	T9 electromagnetic spectrum

T9

疏部

shū bù

T9

密部

mì bù

T9

纵波

zòng bō

T9

声音

shēng yīn

T9

波速

bō sù

T9

波长

bō cháng

T9

电磁波谱

diàn cí bō pǔ

T9

电磁波

diàn cí bō

T9

超声波

chāo shēng bō

T10 wavefront	T10 ray	T10 boundary
T10 reflection	T10 normal	T10 transmission
T10 refraction	T10 refractive index	T10 Snell's law

T10

界面

jiè miàn

T10

波线

bō xiàn

T10

波前

bō qián

T10

透射

tòu shè

T10

法线

fǎ xiàn

T10

反射

fǎn shè

T10

斯涅尔定律

sī niè ěr dìng lǜ

T10

折射率

zhé shè lǜ

T10

折射

zhé shè

T10 critical angle	T10 total internal reflection	T10 optical fibre
T10 diffraction	T10 aperture	T10 principle of superposition
T10 pulse	T10 interference	T10 coherent

T10

光纤

guāng xiān

T10

全内反射

quán nèi fǎn shè

T10

临界角

lín jiè jiǎo

T10

叠加原理

dié jiā yuán lǐ

T10

孔径

kǒng jìng

T10

衍射

yǎn shè

T10

相干的

xiāng gān de

T10

干涉

gān shè

T10

脉冲

mài chōng

T10 path difference	T10 constructive interference	T10 destructive interference
T10 fringe	T10 fringe separation	T11 standing wave
T11 node	T11 antinode	T11 boundary condition

T10

相消干涉

xiāng xiāo gān shè

T10

相长干涉

xiāng zhǎng gān shè

T10

程差

chéng chà

T11

驻波

zhù bō

T10

条纹间距

tiáo wén jiān jù

T10

条纹

tiáo wén

T11

边界条件

biān jiè tiáo jiàn

T11

波腹

bō fù

T11

波节

bō jié

T11 harmonic	T11 first harmonic	T11 natural frequency
T11 driving frequency	T11 resonance	T11 damping
T11 light damping	T11 critical damping	T11 heavy damping

T11

固有频率

gù yǒu pín lǜ

T11

第一谐波

dì yī xié bō

T11

谐波

xié bō

T11

阻尼

zǔ ní

T11

共振

gòng zhèn

T11

驱动频率

qū dòng pín lǜ

T11

过阻尼

guò zǔ ní

T11

临界阻尼

lín jiè zǔ ní

T11

欠阻尼

qiàn zǔ ní

T12 Doppler effect	T12 redshift	T12 blueshift
T12 spectral line	T13 Kepler's laws	T13 ellipse
T13 focus	T13 point mass	T13 Newton's universal law of gravitation

T12

蓝移

lán yí

T12

红移

hóng yí

T12

多普勒效应

duō pǔ lè xiào yìng

T13

椭圆

tuǒ yuán

T13

开普勒定律

kāi pǔ lēi dìng lǜ

T12

谱线

pǔ xiàn

T13

万有引力定律

wàn yǒu yǐn lì dìng lǜ

T13

质点

zhì diǎn

T13

焦点

jiāo diǎn

T13 gravitational field	T13 gravitational field strength	T13 field line
T13 uniform field	T13 orbit	T13 centripetal force
T13 geostationary orbit	T13 apparent weightlessness	T14 electric charge

T13

场线

chǎng xiàn

T13

引力场强度

yǐn lì chǎng qiáng dù

T13

引力场

yǐn lì chǎng

T13

向心力

xiàng xīn lì

T13

轨道

guǐ dào

T13

匀强场

yún qiáng chǎng

T14

电荷

diàn hè

T13

表观失重

biǎo guān shī zhòng

T13

地球静止轨道

dì qiú jìng zhǐ guǐ dào

T14 elementary charge	T14 charge is conserved	T14 electrostatic induction
T14 earthed	T14 charge is quantized	T14 Coulomb's law
T14 permittivity	T14 electric field	T14 electric field strength

T14

静电感应

jìng diàn gǎn yìng

T14

电荷守恒

diàn hè shǒu héng

T14

元电荷

yuán diàn hè

T14

库仑定律

kù lún dìng lǜ

T14

电荷量子化

diàn hè liàng zǐ huà

T14

接地

jiē dì

T14

电场强度

diàn chǎng qiáng dù

T14

电场

diàn chǎng

T14

电容率

diàn róng lǜ

T14 electric field line	T14 edge effect	T14 magnetic field
T14 magnetic field line	T14 right-hand grip rule	T14 solenoid
T15 parabola	T15 tesla	T15 Fleming's left-hand rule

T14

磁场

cí chǎng

T14

边缘效应

biān yuán xiào yìng

T14

电场线

diàn chǎng xiàn

T14

螺线管

luó xiàn guǎn

T14

右手螺旋定则

yòu shǒu luó xuán dìng zé

T14

磁感线

cí gǎn xiàn

T15

弗莱明左手定则

fú lái míng zuǒ shǒu dìng zé

T15

特斯拉

tè sī lā

T15

抛物线

pāo wù xiàn

T15 charge-to-mass ratio	T15 velocity selector	T15 motor effect
T16 nucleus	T16 plum-pudding model	T16 nuclear model
T16 alpha particle	T16 gold foil	T16 evacuated

T15

电动机效应

diàn dòng jī xiào yìng

T15

速度选择器

sù dù xuǎn zé qì

T15

荷质比

hé zhì bǐ

T16

核式模型

hé shì mó xíng

T16

葡萄干布丁模型

pú táo gān bù dīng mó xíng

T16

原子核

yuán zǐ hé

T16

抽真空的

chōu zhēn kōng de

T16

金箔

jīn bó

T16

阿尔法粒子

ā ěr fǎ lì zi

T16 nuclide	T16 nucleon number	T16 proton number
T16 isotope	T16 spectrum	T16 continuous spectrum
T16 emission spectrum	T16 absorption spectrum	T16 discrete

T16

质子数

zhì zǐ shù

T16

核子数

hé zǐ shù

T16

核素

hé sù

T16

连续光谱

lián xù guāng pǔ

T16

光谱

guāng pǔ

T16

同位素

tóng wèi sù

T16

分立的

fēn lì de

T16

吸收光谱

xī shōu guāng pǔ

T16

发射光谱

fā shè guāng pǔ

T16 energy level	T16 photon	T16 line spectrum
T16 ground state	T16 ionisation energy	T17 isotope
T17 strong nuclear force	T17 mass defect	T17 binding energy

T16

线状光谱

xiàn zhuàng guāng pǔ

T16

光子

guāng zǐ

T16

能级

néng jí

T17

同位素

tóng wèi sù

T16

电离能

diàn lí néng

T16

基态

jī tài

T17

结合能

jié hé néng

T17

质量亏损

zhì liàng kuī sǔn

T17

强核力

qiáng hé lì

T17 unified atomic mass unit	T17 binding energy per nucleon	T17 fusion
T17 fission	T17 radioactive decay	T17 random
T17 spontaneous	T17 alpha particle	T17 antineutrino

T17

核聚变

hé jù biàn

T17

比结合能

bǐ jié hé néng

T17

原子质量单位

yuán zi zhì liàng dān wèi

T17

随机的

suí jī de

T17

放射性衰变

fàng shè xìng shuāi biàn

T17

核裂变

hé liè biàn

T17

反中微子

fǎn zhōng wēi zǐ

T17

阿尔法粒子

ā ěr fǎ lì zi

T17

自发的

zì fā de

T17 positron	T17 neutrino	T17 gamma ray
T17 ionisation	T17 activity	T17 becquerel
T17 count rate	T17 half-life	T17 background radiation

T17

伽马射线

gā mǎ shè xiàn

T17

中微子

zhōng wēi zǐ

T17

正电子

zhèng diàn zǐ

T17

贝克勒尔

bèi kè lēi ěr

T17

活度

huó dù

T17

电离

diàn lí

T17

本底辐射

běn dǐ fú shè

T17

半衰期

bàn shuāi qī

T17

计数率

jì shù lǜ

T18 nuclear fission	T18 fission fragment	T18 spontaneous fission
T18 neutron-induced fission	T18 chain reaction	T18 critical mass
T18 moderator	T18 control rod	T18 coolant

T18

自发裂变

zì fā liè biàn

T18

裂变碎片

liè biàn suì piàn

T18

核裂变

hé liè biàn

T18

临界质量

lín jiè zhì liàng

T18

链式反应

liàn shì fǎn yìng

T18

诱发裂变

yòu fā liè biàn

T18

冷却剂

lěng què jì

T18

控制棒

kòng zhì bàng

T18

慢化剂

màn huà jì

T18

heat exchanger

T18

shield

T18

nuclear waste

T19

gas pressure and
radiation pressure

T19

equilibrium

T19

nuclear fusion

T19

proton–proton chain

T19

positron

T19

neutrino

T18

核废料

hé fèi liào

T18

屏蔽层

píng bì céng

T18

热交换器

rè jiāo huàn qì

T19

核聚变

hé jù biàn

T19

平衡

píng héng

T19

辐射压

fú shè yā

T19

中微子

zhōng wēi zǐ

T19

正电子

zhèng diàn zǐ

T19

质子质子链

zhì zi zhì zi liàn

T19 Coulomb barrier	T19 quantum tunnelling	T19 astronomical unit
T19 light year	T19 parsec	T19 stellar parallax
T19 luminosity	T19 apparent brightness	T19 Hertzsprung–Russell diagram

T19

天文单位

tiān wén dān wèi

T19

量子隧穿

liàng zǐ suì chuān

T19

库仑势垒

kù lún shì lěi

T19

恒星视差

héng xīng shì chà

T19

秒差距

miǎo chā jù

T19

光年

guāng nián

T19

赫罗图

hè luó tú

T19

视亮度

shì liàng dù

T19

光度

guāng dù

T19 main sequence	T19 red giant	T19 supergiant
T19 white dwarf	T19 instability strip	T19 nebula
T19 protostar	T19 planetary nebula	T19 supernova

T19

超巨星

chāo jù xīng

T19

红巨星

hóng jù xīng

T19

主序

zhǔ xù

T19

星云

xīng yún

T19

不稳定带

bù wěn dìng dài

T19

白矮星

bái ǎi xīng

T19

超新星

chāo xīn xīng

T19

行星状星云

xíng xīng zhuàng xīng yún

T19

原恒星

yuán héng xīng

T19 neutron star	T19 black hole	T20 uncertainty
T20 random error	T20 systematic error	T20 zero error
T20 accurate	T20 precise	T20 uncertainty bar

T20

不确定度

bù què dìng dù

T19

黑洞

hēi dòng

T19

中子星

zhōng zi xīng

T20

零点误差

líng diǎn wù chā

T20

系统误差

xì tǒng wù chā

T20

随机误差

suí jī wù chā

T20

误差棒

wù chā bàng

T20

精密

jīng mì

T20

准确

zhǔn què

T20 outlier	T20 gradient	T20 intercept
T20 linearise	T20 research question	T20 independent variable
T20 dependent variable	T20 control variable	

T20

截距

jié jù

T20

斜率

xié lǜ

T20

异常值

yì cháng zhí

T20

自变量

zì biàn liàng

T20

研究问题

yán jiū wèn tí

T20

线性化

xiàn xìng huà

T20

控制变量

kòng zhì biàn liàng

T20

因变量

yīn biàn liàng