

## Acronyms of Physics: ?@sec-workenergy

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|--|--|
| $A$ = Action   | $E = E_{kin} + E_{pot}$ = total Energy                                   |
| $t$ = time   | $r$ = space (distance between two points, one-dimensional length)        |
| $v$ = velocity   | $c$ = light speed  |
| $p$ = momentum   | $F$ = Force  |
| $I$ = Inertia  | $\mathcal{L}$ = Lagrangian   |
| $\mathcal{H}$ = Hamiltonian  | $\mathcal{K}$ = kinetic Energy   |
| $\mathcal{U}$ = effective potential Energy ( $\in E_{pot}$ )           | $\mathcal{V}$ = potential Energy ( $\in E_{pot}$ )                       |
| $\mathcal{Z} = \frac{1}{2} \frac{L_0^2}{mr^2}$ = Centrifugal Potential | $V = r_1 \cdot r_2 \cdot r_3$ = Volume                                   |
| $k$ = Wave Vector ("curvature")  | $W$ = Work (done vs. received)   |
| $P$ = Pressure   | $L_0$ = angular momentum   |
| $T$ = endogen Temperature  | $H$ = exogen Heat  |
| $U$ = endogen Energy ( $E_{kin} + E_{pot}$ )                           | $\Phi = \frac{\mathcal{V}}{q}$ = Electric Potential                      |
| $\mathcal{A}$ = Magnetic Potential                                     | $b_0$ = Boltzmann constant   |
| $g_0$ = Gas constant   | $m$ = mass   |
| $\epsilon_0$ = electric constant                                       | $\mu_0$ = magnetic constant  |
| $\mathcal{E}$ = Electric Field   | $\mathcal{B}$ = Magnetic Field   |
| $n$ = amount of particles (objects)                                    | $H\mathcal{C} = m \cdot c_0 = \frac{\Delta H}{\Delta T}$ = heat capacity |
| $c_0 = \frac{1}{m} \frac{\Delta H}{\Delta T}$ = specific heat          | $S = b_0 \cdot \ln(\Omega)$ = Entropy (macro state)                      |
| $l$ = Moll quantity  | $\Omega$ = micro states  |
| $z$ = amount of constraints (boundry conditions)                       | $f = 3n \pm z$ = degrees of freedom                                      |
| $\kappa = \frac{c_P}{c_V} = \frac{f+2}{f}$ = adiabaty                  | $\iota = \kappa$ adiabaty  |
| $\iota = 0$ isobar   | $\iota = 1$ isotherm   |
| $\iota = \infty$ isochor   | ...  |

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## Acronyms of Economy: ?@sec-productivityvalue

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| $T$ = Taxes   | $M$ = Import of Goods and Services from foreing symstes |
| $G$ = Government Expenses, incl. Social Insurances                        | $X$ = Export of Goods and Services to foreign system    |
| $Y$ = Income of Economy from Turnover                                     | $G_A$ = Governental Subsidies                           |
| $D_A$ = Depreciations (Reinvestments) on Assets                           | $V_N$ = Net Naöional Production, Society NNP            |
| $N$ = Monetary Quantity   | $Q$ = Monetary Turnover Velocity                        |
| $V_I$ = Gross Domestic Product $GDP = \frac{Output}{Input}$ , Tradevolume | $P$ = Price niveau (Inflation adjusted Value)           |

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| $L$ = Wages from Labor Work (Salaries, ...)  | $R$ = Returns, Earnings, Gains   |
| $Y_A$ = Income of priv. Business Households<br>(Companies, Services, Real Estate Rentals,<br>Retained Profits) | $Y_H$ = Income from priv. Capital Households<br>(Interests, Coupons, Dividends, ... of priv.<br>Assets, Investmens, Credits, Debits, Bonds,<br>Equity) |
| $T_A$ = Tax on Capital of Corprate Compaies<br>(Business Assets)   | $Y_G$ = Governmental Income from Assets,<br>Services, Social Institutions/Insurances   |
| $Z_G$ = Interests on Governmental Debt   | $V_S$ = Gross National Produkt, Society GNP  |
| $I$ = Investments on Assets, incl. Storage<br>Change   | $R_M$ = Capital Earnings and Wages from<br>Abroad (from Foreign System)  |
| $R_X$ Capital Earnings and Wages to Abroad<br>(to Foreign System)  | $W$ = Expensens, costs from human and<br>machinary work efforts  |

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