

## **Aktivitätspotential $\Gamma_P = 4 \pi^2 D_{P-S}^3 / T_{P-S}^2$ der Sonnenplaneten**

Heinrich Katscher, Prag  
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$$\Gamma_P = D_P v_p^2 = D^2 a_D$$

Gravitationsgesetz

$$a = \Gamma / D^2$$

$$P = M_2 a_1 = \Gamma_1 \Gamma_2 / D^2 G_N = 3,58E22 \text{ N (kg m s}^{-2}\text{) für Erde-Sonne}$$

$$P G_N = \Gamma_1 \Gamma_2 / D^2 = 2,395E12 \text{ m}^4 \text{ s}^{-4} \text{ für Erde-Sonne}$$

$$(P G_N)^{1/4} = 1244 \text{ m s}^{-1} \text{ Geschwindigkeit !}$$

| <b>Sonnensystem</b> |          |          |          | <b><math>4\pi^2 D^3 / T^2</math></b> |
|---------------------|----------|----------|----------|--------------------------------------|
| Sonnen-             | Planeten | D_P-S m  | T_P-S s  |                                      |
|                     | Merkur   | 5,79E+10 | 7,60E+06 | <b>1,33E+20</b>                      |
|                     | Venus    | 1,08E+11 | 1,94E+07 | <b>1,32E+20</b>                      |
|                     | Erde     | 1,50E+11 | 3,16E+07 | <b>1,33E+20</b>                      |
|                     | Mars     | 2,28E+11 | 5,94E+07 | <b>1,33E+20</b>                      |
|                     | Jupiter  | 7,78E+11 | 3,74E+08 | <b>1,33E+20</b>                      |
|                     | Saturn   | 1,43E+12 | 9,29E+08 | <b>1,34E+20</b>                      |
|                     | Uranus   | 2,87E+12 | 2,65E+09 | <b>1,33E+20</b>                      |
|                     | Neptun   | 4,50E+12 | 5,20E+09 | <b>1,33E+20</b>                      |
|                     | Pluto    | 5,90E+12 | 7,81E+09 | <b>1,33E+20</b>                      |
|                     | Eris     | 1,02E+13 | 1,76E+10 | <b>1,35E+20</b>                      |

| Erd- | Mond | Dm-E     | Tm-E     |                 |
|------|------|----------|----------|-----------------|
|      | Mond | 3,83E+08 | 2,36E+06 | <b>3,98E+14</b> |

| Mars- | Monde  | Dm-M     | Tm-M     |                 |
|-------|--------|----------|----------|-----------------|
|       | Phobos | 9,38E+06 | 2,76E+04 | <b>4,28E+13</b> |
|       | Deimos | 2,35E+07 | 1,09E+05 | <b>4,31E+13</b> |

| Jupiter- | Monde    | Dm-J     | Tm-J     |                 |
|----------|----------|----------|----------|-----------------|
|          | Jo       | 4,22E+08 | 1,53E+05 | <b>1,27E+17</b> |
|          | Europa   | 6,71E+08 | 3,07E+05 | <b>1,27E+17</b> |
|          | Ganymed  | 1,07E+09 | 6,18E+05 | <b>1,27E+17</b> |
|          | Kallisto | 1,88E+09 | 1,44E+06 | <b>1,26E+17</b> |
|          | Leda     | 1,12E+10 | 2,08E+07 | <b>1,28E+17</b> |
|          | Himalia  | 1,15E+10 | 2,11E+07 | <b>1,35E+17</b> |
|          | Sinope   | 2,39E+10 | 6,56E+07 | <b>1,25E+17</b> |

| Saturn- | Monde     | Dm-S     | Tm-S     |                 |
|---------|-----------|----------|----------|-----------------|
|         | Pan       | 1,34E+08 | 4,97E+04 | <b>3,84E+16</b> |
|         | Prometeus | 1,39E+08 | 5,29E+04 | <b>3,79E+16</b> |
|         | Mimas     | 1,85E+08 | 8,12E+04 | <b>3,79E+16</b> |
|         | Tethys    | 2,95E+08 | 1,63E+05 | <b>3,81E+16</b> |
|         | Rhea      | 5,27E+08 | 3,90E+05 | <b>3,80E+16</b> |
|         | Titan     | 1,22E+09 | 1,38E+06 | <b>3,76E+16</b> |
|         | Hyperion  | 1,46E+09 | 1,84E+06 | <b>3,63E+16</b> |
|         | Iapetus   | 3,56E+09 | 6,85E+06 | <b>3,80E+16</b> |
|         | Albiorix  | 1,64E+10 | 6,77E+07 | <b>3,80E+16</b> |
|         | Ymir      | 2,31E+10 | 1,13E+08 | <b>3,81E+16</b> |

| Uranus- | Monde   | Dm-U     | Tm-U     |                 |
|---------|---------|----------|----------|-----------------|
|         | Miranda | 1,29E+08 | 1,22E+05 | <b>5,69E+15</b> |
|         | Ariel   | 1,91E+08 | 2,18E+05 | <b>5,79E+15</b> |
|         | Umbriel | 2,66E+08 | 3,59E+05 | <b>5,76E+15</b> |
|         | Titania | 4,36E+08 | 7,52E+05 | <b>5,78E+15</b> |
|         | Oberon  | 5,84E+08 | 1,16E+06 | <b>5,84E+15</b> |

| Neptun- | Monde    | Dm-N     | Tm-N     |                 |
|---------|----------|----------|----------|-----------------|
|         | Thalassa | 5,00E+07 | 2,69E+04 | <b>6,82E+15</b> |
|         | Despina  | 5,25E+07 | 2,89E+04 | <b>6,84E+15</b> |
|         | Galatea  | 6,19E+07 | 3,71E+04 | <b>6,80E+15</b> |
|         | Larissa  | 7,35E+07 | 4,79E+04 | <b>6,83E+15</b> |
|         | Proteus  | 1,18E+08 | 9,69E+04 | <b>6,91E+15</b> |
|         | Triton   | 3,55E+08 | 5,08E+05 | <b>6,84E+15</b> |
|         | Nereid   | 5,51E+09 | 3,11E+07 | <b>6,83E+15</b> |

| Pluto- | Mond   | Dm-P     | Tm-S     |                 |
|--------|--------|----------|----------|-----------------|
|        | Charon | 1,96E+07 | 5,48E+05 | <b>9,90E+11</b> |

