THE PATTERN IN THE LOCATION OF THE PLANETS OF THE SOLAR SYSTEM

The dependence of the distances of the planets of the Solar system from the stars describes the irrational number φ.

$$\varphi = 0{,}5(\sqrt{5} + 1) = 1{,}6180339...$$

The irrational number φ has unique mathematical properties. Multiple multiplying of any number by the irrational number φ forms a numerical sequence, in which the next member of the sequence is equal to the sum of the two previous members. It is a numerical sequence form the average distances of the planets of the Solar system from our stars without consideration of the mutual influence.

Of the planet	The average distance from the Sun $(\times 10^9)$ m	The calculated distance from the Sun $L_{x(n)}$ $(\times 10^9)$ m	Deviation of the average distance from the settlement (%)	Indicator of degree n the number of φ $\varphi = 1{,}618034$
Mercury	57,9	59,5996	-2,852	11
Venus	108,2	96,4342	+12,201	12
Earth	149,6	156,0338	-4,123	13
Mars	227,9	252,4681	-9,731	14
Asteroid belt	418,9	408,5019	+2,545	15
Jupiter	778,3	660,9700	+17,751	16
Free orbit	-	-	-	17
Saturn	1427	1730,4418	-17,536	18
Uranium	2870	2799,9137	+2,503	19
Neptune	4496	4530,3556	-0,758	20
Pluto	5910	-	-	21
		$L_{x(n)} = 0{,}299488\varphi^n$	$\Sigma = 0{,}001$ %	