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## Solar System Dynamics

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### 29250 Helmutmoritz (1992 SO17)

Classification: [Main-belt Asteroid](#)

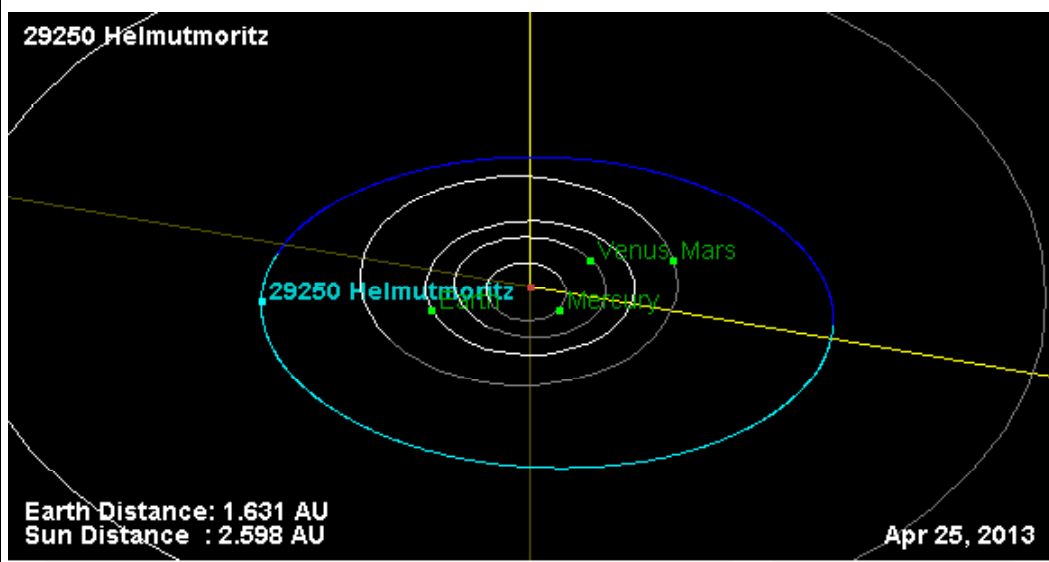
SPK-ID: 2029250

[\[ Ephemeris | Orbit Diagram | Orbital Elements | Physical Parameters | Discovery Circumstances \]](#)

[\[ hide orbit diagram \]](#)

### Orbit Diagram

**Note:** Make sure you have Java enabled on your browser to see the applet. This applet is provided as a 3D orbit visualization tool. The applet was implemented using 2-body methods, and hence **should not be used for determining accurate long-term trajectories (over several years or decades) or planetary encounter circumstances.** For accurate long-term ephemerides, please instead use our [Horizons system](#).



**29250 Helmutmoritz**  
 Earth Distance: 1.631 AU  
 Sun Distance : 2.598 AU  
 Apr 25, 2013

Date Label     Planet Labels  
 Distance     Object Label

Date: 1 Day  
 Center: Sun  
 Orbits: Default Orbits

Zoom:  Save Image

Additional Notes: the orbits shown in the applet are color coded. The planets are white lines, and the asteroid/comet is a blue line. The bright white line indicates the portion of the orbit that is above the ecliptic plane, and the darker portion is below the ecliptic plane. Likewise for the asteroid/comet orbit, the light blue indicates the portion above the ecliptic plane, and the dark blue the portion below the ecliptic plane.

Orbit Viewer applet originally written and kindly provided by [Osamu Aiki](#) (AstroArts), and further modified by [Ron Baalke](#) (JPL).

Orbital Elements at Epoch 2456400.5 (2013-Apr-18.0) TDB  
 Reference: [MPO257068](#) (heliocentric ecliptic J2000)

Element	Value	Uncertainty (1-sigma)	Units
<a href="#">e</a>	0.1708167	n/a	
<a href="#">a</a>	2.7756134	n/a	AU

Orbit Determination Parameters

<a href="#"># obs. used (total)</a>	668
<a href="#">first obs. used</a>	1985-??-??
<a href="#">last obs. used</a>	2013-03-20
<a href="#"># oppositions</a>	16

<a href="#">q</a>	2.3014923	n/a	AU		
<a href="#">i</a>	7.58688	n/a	deg	<a href="#">planetary ephem.</a>	DE403
<a href="#">node</a>	183.70685	n/a	deg	<a href="#">condition code</a>	0
<a href="#">peri</a>	301.40559	n/a	deg	<a href="#">fit RMS</a>	0.52
<a href="#">M</a>	57.41580	n/a	deg	<a href="#">data source</a>	MPC:mpn
<a href="#">t<sub>p</sub></a>	2456131.1197157	n/a	JED	<a href="#">producer</a>	MPCLINUX
	(2012-Jul-22.61971570)				
<a href="#">period</a>	1689.0281482	n/a	d	<b>Additional Information</b>	
	4.62	n/a	yr	<a href="#">T<sub>jup</sub></a> = 3.301	
<a href="#">n</a>	0.21314032	n/a	deg/d		
<a href="#">Q</a>	3.2497345	n/a	AU		

[ [Ephemeris](#) | [Orbit Diagram](#) | [Orbital Elements](#) | [Physical Parameters](#) | [Discovery Circumstances](#) ]

#### Physical Parameter Table

Parameter	Symbol	Value	Units	Sigma	Reference	Notes
<a href="#">absolute magnitude</a>	H	14.1	mag	n/a	PDS3 (MPO 16225)	

#### 29250 Helmutmoritz

Discovered 1992 Sept. 24 by L. D. Schmadel and F. Börngen at Tautenburg.

Helmut Moritz (b. 1933) is the most prominent Austrian professor of physical geodesy, a member of the Austrian Academy of Sciences and of many other international academies and societies. Moritz published more than 200 important papers and books on the gravitational field and the rotation of the earth.

NOTE: some special characters may not display properly (any characters within {} are an attempt to place the proper accent above a character)

Reference: 20090209/MPCPages.arc

Last Updated: 2009-02-11

#### Alternate Designations

1992 SO17 = 1985 DR2 = 1999 GY

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2013-Apr-25 08:06 UT  
(server date/time)



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