

APPLICATION OF VON ZEIPEL'S METHOD TO THE MINOR PLANET (447) VALENTINE

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Developments of the disturbing function up to the terms of sixth order in the eccentricities and mutual inclination of Valentine and Jupiter orbits have been considered in this problem.

This matter arises from the fact that two degrees are lost when the solutions of the Delaunay angular variables are taken into account. Moreover there are special combinations of the mean motions of Jupiter and Valentine which claim for the above mentioned accuracy.

In order to avoid the appearance of variables different from Delaunay's, Jupiter's orbital plane has been taken as fundamental one. Jupiter's elements are taken as constants in the first approximation. The longitudes are reckoned from Jupiter perihelium. We are computing the Laplace coefficients and their derivatives at the present time.

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