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Dr. Hujer Tells

To The News-Free Press: A RARE COMET ENTERS THE CELESTIAL SCENE

On March 7 of this year a 'Czech refugee astronomer, Dr.-Lubos Kohoutek, instructor at Hamburg University Observatory in Western Germany, made a spectacular discovery of the now already world-famous Comet Kohoutek. A special gathering of astronomers and other scientists at the University of Arizona in Tucson last June discussed the organization of coordinated observation and study of this comet while it obtains Skylab priority -an unprecedented kind of observation, a symbol of modern technological accomplishments.

All aspects concerning Comet Kohoutek are unusual, particularly the very possibility of * its coming toward the sun instead of its sudden apparition. As it will reach great brightness at Christmas time, Der Spiegel, the well-known German weekly magazine states, the discovery: announcing "The Christmas comet was a harbinger of the death of kings and war." Official astronomers in Czechoslovakia, obedient to their oppressive regime, are embarrassed that such a significant discovery is made outside Kohoutek's native land, and in addition, March 7 happens to be the birthday of the first President-Liberator of Czechoslovakia, T.G. Masaryk. They are also skeptical of the expected comet's brightness whereas in the free world optimism is 99 per cent in favor of great brilliance.

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The extraordinary circumstances of Comet Kohoutek's discovery consists in its first location, in Hydra constellation, when it was 400 million miles distant from our earth and within the orbit of Jupiter, hence unobservable by any telescope. It therefore could only be recorded photographically because of extreme faintness. Brian G. Marsden of Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, from several positions recorded up to the end of April, was able to determine the orbit of Comet Kohoutek which astonished the astronomical world by unexpected elements: The comet will reach the vicinity of the sun on Christmas, passing the nearest point, perihelion, on December 28, well inside the orbit of Mercury. Before that date Comet Kohoutek will first become the morning phenomenon on the eastern sky, before sunrise, and for about three weeks observable without telescope before dawn. At this present time, around October 25, it is still only a telescopic object, close to the constellation Raven, to be seen in the morning before dawn on an unobstructed eastern horizon.

But after the December 28 perihelion passage, through allof January 1974, it will be visible on the western sky after sunset, some evenings as late as 10 p.m. Comet Kohoutek will reach an incomparable brightness, more than fifty-times greater than the famous historical Halley's comet, last seen in 1910. This unsurpassed brilliance will occur when Comet Kohoutek reaches the zodiacal

signs of Capricornus and Aquarius—a location which offers a rich source for mythological speculation for astrological mystics, especially due to the fact that the equinoxial sunfor the next twenty-two centuries is moving into Aquarius.

Through January 1974, particularly in the first ten days of that month, Comet Kohoutek's tail, some 40 million miles long, will cover about one-sixth of the sky after it has grazed the sun inside Mercury's orbit. The sun's gravitational effect will produce a quivering tension on the comet and the solar wind will prolong the tail to its unusual length. Therefore, one may conclude that such a phonomenon has not occurred for a quarter of a millenium, to say the least, especially the prediction of such a comet's arrival. Marsden's orbit determination, confirmed by D.K. Yoemans of the Computer Science Corporation, reveals that Comet Kohoutek's eccentricity is no less than 0.9999 which means that its period of revolution about the sun is well over 50,000 years, while some astronomers believe as much as one million years. We may therefore infer that this comet will return into its interstellar deep freeze after its one visit into the view of terrestrial observers, and thus will join millions of similar bodies roaming through the abyss of our universe. A most unique and superb star of Bethlehem is coming, evermore needed in this portentous age.

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