## Mineur, Henri | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons 4-6 minutes

(b. Lille, France, 7 March 1899; d. Paris, France, 7 May 1954)

astronomy, astrophysics, mathematics.

Although he was first on the admissions list of the école Normale Supérieure in 1917, Mineur enlisted in the army and did not enter the school until after the end of <u>World War I</u>. After passing the *agrégation* in mathematics in 1921, he taught at the French *lycée* in Düsseldorf while pursuing the mathematical research he had begun in 1920. He received his doctorate in science in 1924 for his work on functional equations, in which he established an addition theorem for Fuchsian functions.

Mineur had been interested in astronomy from his youth, and in 1925 he left his teaching post to become astronomer at the Paris observatory. He made important contributions to several fields related to mathematical astronomy: <u>celestial mechanics</u>, analytic mechanics, statistics, and numerical calculus. His treatise on the method of least squares has become a classic.

It was in stellar astronomy, however, that Mineur's work was most sustained and fruitful. In particular, he detected the variation in the speed of near stars according to the distance from the galactic plane and the retrograde rotation of the system of globular clusters. He also corrected the coordinates of the galactic center and studied interstellar absorption. As early as 1944 he showed that an important correction had to be made in the zero of the period-luminosity relation of the Cepheids; this change led to a doubling of the scale of distances in the universe. All these results have been confirmed by recent investigations.

Mineur was a brilliant and unusual person who became thoroughly involved in many areas. Between 1940 and 1944 he was a member of the Resistance. He was a founder of the Centre National de la Recherche Scientifique and of the observatory of Saint-Michel in Haute-Provence. At his initiative the Institute d' Astrophysique was created at Paris in 1936; he was its director until his death, which occurred after five years of a serious heart and liver ailment. Mineur twice won prizes of the Académie des Sciences.

## **BIBLIOGRAPHY**

I. Orginal Works. In kinematics and stellar dynamics Mineur's principal writings are "Rotation de la galaxie," in *Bulletin astronomique*, 5 (1925), 505–543; "étude de mouvements propres moyens d'étoiles," *ibid*. 6 (1930), 281–304; "Recherche sur les vitesses radiales résiduelles ...," *ibid*. 7 (1931), 321–352, written with his wife; *éléments de statistique...stellaire*, Actualités *Scientifiques el Industrielles*, no. 116 (Paris, 1934); *Photographie stellaire* ..., *ibid*., no. 141 (Paris, 1934); *Dénombrement d'átoiles*..., *ibid*., no. 225 (Paris, 1935); "Recherehes sur la distribution de la matiére absorbante ...," in *Annales d'astrophysique*, 1 (1938), 97-128; "Sur la rotation galactique ...," *ibid*., 269–281; "équilibre des nuages galactiques ...," ibid., 2 (1939), 1–244; "Zéro de la relation période-luminosité ...," *ibid*., 7 (1944), 160–186; and "Recherches théoriques sur les accélérations stellaires," *ibid*. 13 (1950), 219–242, Some of these investigations are summarized in *L'espaee interstellaire* (Paris, 1947).

In celestial and analytical mechanics, see especially "La mécanique des masses variables...," in *Annales scientifiques de l'école normale supérieure*, 3rd ser., **50** (1933), 1–69 "étude théorique du mouvement séculaire de l'axe terresre," in *Bulletin astronomique*, **13** (1947), 197–252; "Quelques propriétés ... équations de la méeanique," *ibid.*, **13** (1948), 309–328; and "Recherche ... dans le groupe canonique linéaire," *ibid.*, **15** (1950), 107–141.

In statistics and numerical calculus, see Technique de la méthode des moindres carrés (Paris, 1938); "Nouvelle méthode de lissage ... période d'un phénoméne," in Annates d'astrophysique." **6** (1943), 137–158; "Sur la meilleure representation d'une variable aléatoire ...," *ibid.*, **7** (1944), 17–30; and *Techniques de calcul numérique* (Paris, 1952).

His works in analysis include his doctoral dissertation, "Théone analytique des groupes conlinus finis," in *Journal de mathématiques pures et appliquées*, 9th ser., **4** (1925), 23–108; and "Calcul différentiel absolu," in *Bulletin des sciences mathématiques*, 2nd ser., **52** (1928), 63–76.

**II.** Secondary Literature. See D. Barbier, "Henri Mineur," in *Annates d'astrophysique*, **17** (1954), 239–242; and J. Dufay, "Henri Mineur," in *Astronomie*, **70** (1956), 235–238,