

**Cartan, Elie**

**Exterior differential systems and their geometric applications. (Les systèmes différentiels extérieurs et leurs applications géométriques.)** (French) [Zbl 0063.00734](#)

Actualités Scientifiques et Industrielles. No. 994. Paris: Hermann & Cie. 214 p. (1945).

For an extensive review by *J. M. Thomas* see [Bull. Am. Math. Soc. 53, No. 3, 261–266 (1947)].

**MSC:**

[58-01](#) Introductory exposition (textbooks, tutorial papers, etc.) pertaining to global analysis

[58A15](#) Exterior differential systems (Cartan theory)

[58A17](#) Pfaffian systems

[58A10](#) Differential forms in global analysis

Cited in **2** Reviews  
Cited in **86** Documents

**Keywords:**

Grassmann algebra; differential of exterior forms; Stokes' theorem; Pfaffian systems; existence theorems; method of prolongations