

**Komuro, M.; Matsumoto, T.; Chua, L. O.**

**Poincaré maps of the double scroll.** (English) [Zbl 0625.58013](#)

Dynamical systems and nonlinear oscillations, Proc. Symp., Kyoto/Jap. 1985, RIMS Kokyuroku 574, 126-134 (1985).

[For the entire collection see [Zbl 0605.00012](#).]

A family of piecewise linear vector fields of  $\mathbb{R}^3$  is discussed. A detailed analysis is given of the linearly conjugate classes and the Poincaré maps for the family. A result of the analysis is applied to the study of bifurcation of an attractor.

**MSC:**

**37G99** Local and nonlocal bifurcation theory for dynamical systems

Cited in **7** Documents

**Keywords:**

double scroll; Poincaré maps; conjugate classes; bifurcation