

**Nachar, G.**

**Un exemple d'anneau caténaire. (An example of a catenarian ring).** (English) [Zbl 0664.13008](#)  
C. R. Math. Acad. Sci., Soc. R. Can. 8, 209-213 (1986).

Let  $\mathbb{Z}_{(2)}[[X]]$  be the ring of formal power series over  $\mathbb{Z}_{(2)}$  and  $K$  its quotient field. Let  $T = \mathbb{Z}_{(2)}[[X]] + YK[[Y]]$  be the subring of  $K[[Y]]$  made up of series whose constant terms are in  $\mathbb{Z}_{(2)}[[X]]$ . The author shows that  $T$  is a non-Noether, non-Prüfer ring of dimension 3 such that  $T[[Z]]$  is a catenarian ring of dimension 4.

**MSC:**

**13F25** Formal power series rings

**13E99** Chain conditions, finiteness conditions in commutative ring theory