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**A note on the geometry of partial realization.** (English) [Zbl 0726.93016](#)

Realization and modelling in system theory, Proc. Int. Symp., Math. Theory Networks Syst., MTNS, Vol. I, Amsterdam/Neth. 1989, Prog. Syst. Control Theory 3, 157-165 (1990).

Summary: [For the entire collection see [Zbl 0723.00046](#).]

We study some geometrical questions related to partial realization. In particular, we construct a cellular decomposition of the space  $S(n, \tau)$  of all finite sequences of fixed length  $\tau$  which have a minimal realization of dimension  $n \leq \tau$ . Moreover, we present continuity results for different canonical realization maps on the sequence spaces  $S(n, \tau)$ .

**MSC:**

[93B15](#) Realizations from input-output data  
[93B10](#) Canonical structure  
[93B27](#) Geometric methods

Cited in **2** Documents

**Keywords:**

[cellular decomposition](#)