

**MEANDERING OF TRAJECTORIES
OF POLYNOMIAL VECTOR FIELDS
IN THE AFFINE n -SPACE**

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Abstract

We give an explicit upper bound for the number of isolated intersections between an integral curve of a polynomial vector field in \mathbb{R}^n and an affine hyperplane.

The problem turns out to be closely related to finding an explicit upper bound for the length of ascending chains of polynomial ideals spanned by consecutive derivatives.

This exposition constitutes an extended abstract of a forthcoming paper: only the basic steps are outlined here, with all technical details being either completely omitted or at best indicated.
