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Michael Paul Landry* (mlandry@wustl.edu), **Yair N Minsky** and **Samuel J Taylor**. *Flows, growth rates, and the veering polynomial.*

A pseudo-Anosov flow with no perfect fits is a generalization of the suspension flow of a pseudo-Anosov surface diffeomorphism. Work of Agol and Gueritaud associates a canonical veering triangulation to such a flow. In earlier work we introduced a polynomial invariant of veering triangulations called the veering polynomial, which is a generalization of McMullen's Teichmüller polynomial and can also be thought of as a polynomial invariant of these flows. In new work we show that the polynomial encodes growth rates of semiflows obtained by decomposing the ambient three-manifold along transverse surfaces. This leads to connections with depth one foliations, the theory of endperiodic automorphisms of infinite type surfaces, and the foliation cones of Cantwell-Conlon. This is joint work with Yair Minsky and Samuel Taylor. (Received August 17, 2021)