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**Signature asymptotique d'un champ de vecteurs en dimension 3. (French. English summary)** [Asymptotic signature of a vector field in dimension 3]

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Summary: “Consider a volume-preserving vector field defined in some compact domain of 3-space and tangent to its boundary. A long piece of orbit can be made into a knot by connecting its endpoints by some arc whose length is less than the diameter of the domain. In this paper, we study the behaviour of the signatures of these knots as the lengths of the pieces of orbits go to infinity. We relate this ‘asymptotic signature’ to the ‘asymptotic Hopf invariant’ that has been studied by Arnold.”

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