**Dynamical Systems and Applications** 



Contribution ID: 14

Type: not specified

## Singular-expansive properties of flows

Thursday 5 December 2019 09:30 (55 minutes)

(joint with X. Wen and Y. Yang) A new kind of expansiveness for flows namely the singular-expansivity is proposed. We prove that it coincides with the rescaling expansivity for C1 generic vector fields. We give sufficient conditions for a k\*-expansive flow to be singular-expansive. We prove that a singular-expansive flow has countably many periodic orbits and, if the set of singularities is isolated, then it has finitely many periodic orbits of bounded period. We give an example of a singular-expansive flow with the shadowing property which is not expansive. Further examples are given.

Presenter: MORALES, Carlos (Universidade Federal do Rio de Janeiro)