

**Čech cohomology and the region of influence of
non-saddle sets**

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This talk is devoted to show some properties of a class of isolated invariant compacta known as non-saddle sets. We shall see that while the local dynamics near these sets is fairly easy, flows having this kind of invariant sets may exhibit a great deal of global complexity. As we will see, this global complexity is closely related to the way in which the non-saddle set sits in the phase space at the cohomological level.