Continuum-wise hyperbolicity

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In this talk, I will introduce the classical example of P. Walters of the pseudo-Anosov diffeomorphism of the two-dimensional sphere, note several properties that are not very clear at first glance, and discuss a generalization of hyperbolicity called continuum-wise hyperbolicity that is present in this example. Then I will discuss some consequences of cw-hyperbolicity and recent advances in the classification of cw-hyperbolic surface homeomorphisms.

References

[1] R. Arruda, B. Carvalho, A. Sarmiento. Continuum-wise hyperbolic homeomorphisms on surfaces. (2023) *Discrete and Continuous Dynamical Systems* **44** (3) (2024) 768-790.

[2] A. Artigue, B. Carvalho, W. Cordeiro, J. Vieitez. Continuum-wise hyperbolicity. *Journal of Differential Equations* **378** (2024) 512–538.