

Pontificia Universidad Católica del Perú
Escuela de Posgrado & Sección Matemáticas



Seminario de Matemática

The existence of stable and unstable continua for
Continuum-Wise Hyperbolic Flows

Margoth Tacuri

Pontificia Universidad Católica del Perú (PUCP)

Abstract: In this talk, we will present various properties of stable and unstable sets of cw-expansive flows. We generalize the results described in [1, Lemma 4], [1, Lemma 5], and [2, Lemma 6.4], proving that cw-expansive flows defined on a Peano continuum do not have stable and unstable points. As a consequence, we will demonstrate that these flows have a continuum in each stable and unstable set of uniform size. In a second scenario, we define Cw-hyperbolic flows and verify that such flows satisfy the shading property.

Fecha: Miércoles 07 de mayo de 2025

Hora: 14:00 - 15:00 horas

Lugar: Auditorio de Matemáticas.

References

- [1] M. PATERNAIN, Expansive Flows and the Fundamental Group, *Bull. Braz. Math. Soc.* **24** (1993) 179-199. <https://doi.org/10.1007/BF01237676>
- [2] A. ARBIETO, W. CORDEIRO, M. J. PACIFICO, Continuum-wise expansivity and entropy for flows, *Ergodic Theory Dynam. Systems*, **164** (2017) 1-21. <https://doi.org/10.1017/etds.2017.79>