

IMPLICATION DIAGRAM OF FIVE CHAOS CHARACTERIZATIONS: A SURVEY ON COMPACT METRIC SPACE AND SHIFT OF FINITE TYPE

(Diagram Implikasi bagi Lima Pencirian Kalut: Suatu Tinjauan pada
Ruang Matrik Padat dan Ruang Anjakan Terhingga)

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ABSTRACT

We give a summary on the development of the relationships between some chaos characterizations, focusing on Devaney chaos, locally eventually onto, strong dense periodic points, topologically mixing and totally transitive. We represent the relationships in four implication diagrams. We look at compact metric spaces in general and on shifts of finite type in particular. At the end, it is shown that different spaces yield different results.

Keywords: locally eventually onto; strong dense periodic points; totally transitive; topologically mixing; Devaney chaos

ABSTRAK

Kami menyimpulkan hasil kajian yang memberikan hubungan di antara sebilangan pencirian kalut, iaitu kalut Devaney, akhirnya keseluruhan secara setempat, titik-titik berkala tumpat kuat, percampuran secara topologi dan transitif sepenuhnya. Hubungan ini diberikan dalam bentuk empat gambar rajah implikasi. Kami menumpukan pada ruang metrik padat secara amnya dan anjakan jenis terhingga secara khususnya. Didapati, ruang metrik yang berbeza memberikan hasil kajian yang berbeza.

Kata kunci: akhirnya keseluruhan secara setempat; titik-titik berkala tumpat kuat; percampuran secara topologi; transitif sepenuhnya; kalut Devaney

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