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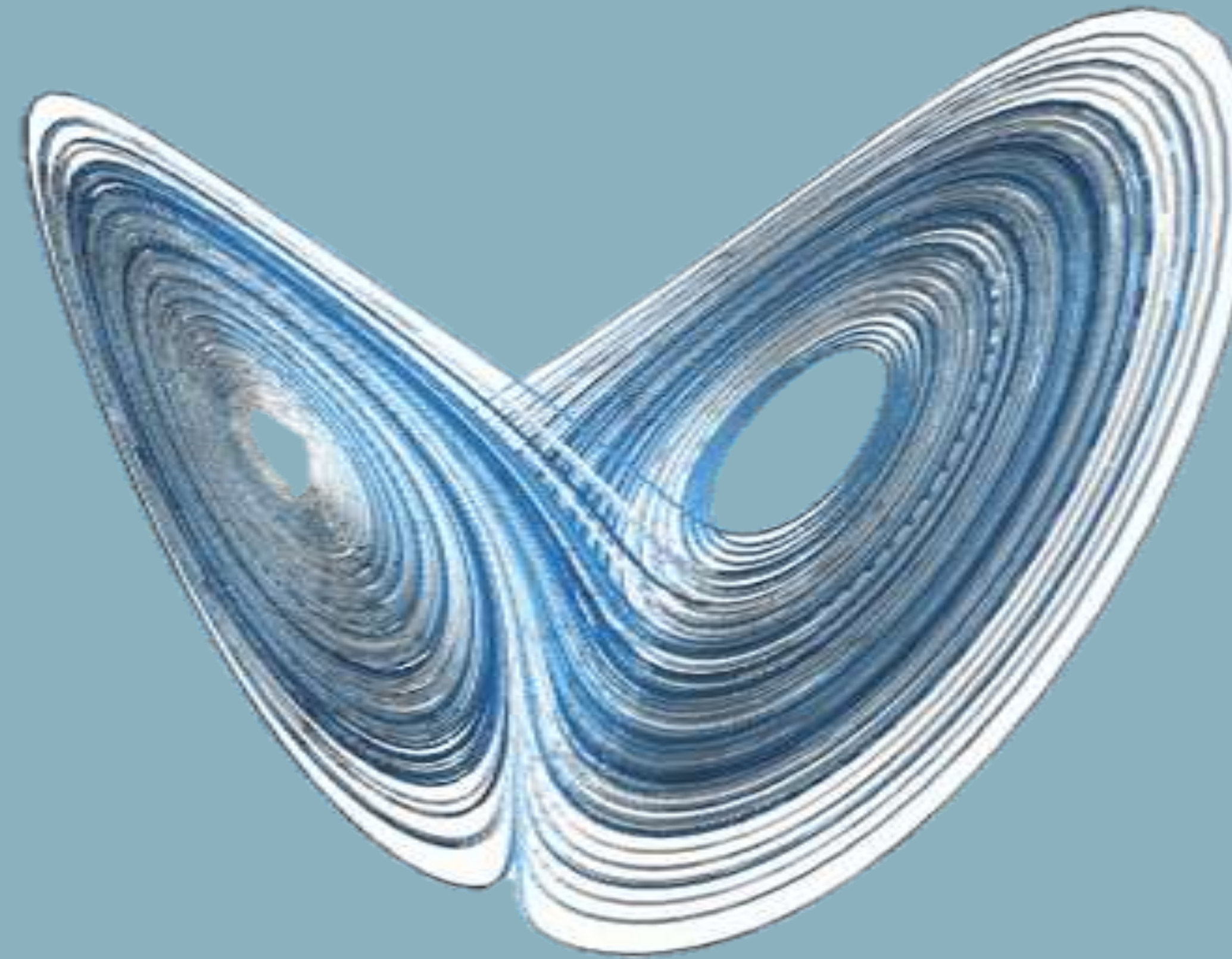
Introduction

In chaos theory, the butterfly effect is the sensitive dependence on initial conditions in which a small change in one state of a deterministic nonlinear system can result in large differences in a later state .

The butterfly effect is a derivative of the chaos theory

Discovery

The term "**butterfly effect**" was coined by meteorologist Edward Lorenz, who discovered in the 1960's that tiny, butterfly scale changes to the starting point of his computer weather models resulted in anything from sunny skies to violent storms with no way to predict in advance what the outcome might be.



Experiment

Edward Lorenz, entered some numbers into a computer program simulating weather patterns. later that same day, he repeated the same simulation, but this time he rounded off one variable from 0.506127 to 0.506 then he left his office while the machine ran the simulation. when he returned, he noticed, the result was very much different .

Reference

https://en.wikipedia.org/wiki/Butterfly_effect
<https://aps.org/publications/apsnews/200406/butterfly-effect.cfm>
<https://www.wittenborg.eu/butterfly-effect-teaches-us-small-things-matter.htm>

The second type

The human butterfly effect:
Humans are part of this sensitive system which mean every choice that we make will effect our future but the result will be unknown, that is why we can not manipulate the effect of these small changes, you are capable of changing the future so think at least twice before you take an action.

Conclusion

The two pertinent things that the butterfly effect teaches us is that small things matter, and we are all connected to a bigger system. Our action now, today, would have been the result of a previous action and this could in turn, lead to a future action. With one small gesture, you can change somebody's life.