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On the Rossler Attractor

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Turning 80 this month, I am somehow relieved from the burden of having to be totally up-to-date and having to respond to specifics, being rather allowed to summarize what I consider the most important issue from my momentary point of view which automatically is very narrow and totally outdated.

I feel chaos theory still is one of the greatest fields. The study of chaos represents the most complicated steady-state behavior known in dynamical systems. Recent years have seen rapid improvements in integer and fractional-order chaotic systems with engineering applications Barrio *et al.* (2009); Cafagna and Grassi (2009); Nikolov and Clodong (2006). Chaos-based applications form an important issue in both science and engineering. Novel chaotic systems have been presented in recent engineering applications. Many studies have been done on the basis of well-known systems with chaotic attractors, including also the Lorenz, the Chua, and the Chen system.

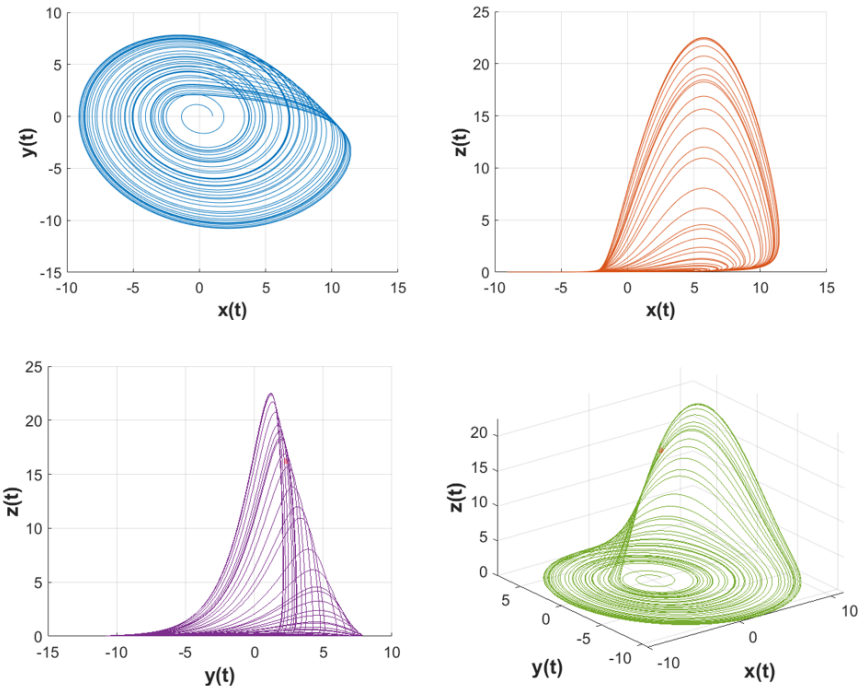

Figure 1 Phase portraits of my chaotic attractor Rössler (1976)

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Researchers are contributing to chaos theory and its applications with original articles showing a continuing effort to understand chaos-based engineering applications such as electronic circuit design Taskiran and Sedef (2020); Minati *et al.* (2019), security Abundiz-Pérez *et al.* (2016); Girdhar and Kumar (2018), synchronization Razminia *et al.* (2011), control Hsieh *et al.*(1999), communication Schmitz and Zhang (2017), artif-ical neural network Sunny *et al.* (2018), FPGA Koyuncu *et al.* (2017) and parameter estimation He *et al.* (2016) in nonlinear systems.

You see, turning 80 has its advantages: you can dream freely about winning the interest of an ingenious writer. And whether or not a single young scientist will decide to embark on the golden road you have laid out for her or him is a matter of both irrelevancy and happy daydreaming.

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