

# SE&T Colloquium Series-Fall 2016

Speaker	Dr. Yasuteru Hosokava Faculty of Management and Information Science Shikoku University, Japan
Title	<b><i>Investigation of Chaotic Phenomena Using Electronic Circuits</i></b>
Abstract	<p>Various kinds of interesting phenomena are observed on a nonlinear system. One of the most interesting phenomena is chaos. In order to distinguish the chaos from the general meaning like confusion or a disorder, these phenomena are sometimes called as deterministic chaos. The chaos is investigated in many research areas such as mathematics, physics, astronomy, chemistry, economics, many kinds of engineering and so on. For instance, a rotation of Hyperion, which is a moon of Saturn, is chaotic, chaotic behavior in the Belousov-Zhabotinsky (BZ) reaction was reported and a double pendulum moves chaotically.</p> <p>An electronic circuit is a very useful tool for an investigation of the chaos, because the electronic circuit is a natural physical system and easy to coincide with the theory. Additionally, electronic elements are low prices and high qualities. It is difficult to experiment with a real system of a large coupled chaotic system excepting electronic circuits. Therefore, we have been investigating chaotic phenomena and related phenomena using electronic circuits.</p> <p>In this talk, I will introduce some chaotic behavior models such as a double pendulum, a logistic map and so on. Further, I will talk about some chaotic phenomena of electronic circuits.</p>
Date	Tuesday, November 29
Time	4:10-5:00pm
Place	Pioneer 240
	Refreshments will be served at 4:00pm.