OIST SEMINAR

Date: February 20th, 2018 (Tue)
Time: 15:00 – 16:00
Venue: D015 (Lab1, Level D)
Speaker: Prof. Masato Nagata
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Bifurcations in rotating plane Couette flow at moderate Reynolds numbers

During the past few decades, the problem of plane Couette flow with system rotation has served as a suitable testing ground for comparison between experiments and theories. This classical problem is revisited in the current paper in order to gain a new insight into transition to turbulence when the Reynolds number is relatively small. It is found that, in addition to the conventional two states, there exist three flow states. The coexistence of the total five flow states may play an important role to guide the flow into a complicated three-dimensional state, such as called Braided or Spaghetti state, which has not been resolved completely.