

The Dynamics of Interacting Camphor Rotors

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Invited
Talk 6

The dynamics of interacting two camphor ribbons which are made up of rectangular pieces of paper that have been impregnated with camphor will be discussed. When positioned on the water's surface, these ribbons rotate because of the symmetry breaking brought on by variations in camphor concentration. In this simple system, we observed a variety of dynamics, including mixed, aperiodic, liberation, and co- & counter-rotating synchronised oscillations. We shall present the experimental, analytical, and numerical investigations to comprehend the existence of such motions. We'll talk about nontirvial bifurcation diagrams to comprehend the different transitions as a function of energy.

**This presentation is based on our joint works with Prof. P. Parmananda (IIT, Bombay), Prof. S.D. Gadre (Delhi University), and Dr. S. Kumarasamy (CAIEE, Chennai)*
