

Complex Dynamics Group Seminar

The Hopf bifurcation: from geometric point of view

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Abstract

We shall discuss the problem issuing from the vector field behavior as the parameter changes, such that almost the whole discussion will be geometric. The explanation will help to formulate the "nonlinear" counterparts of the theorem, for continuous and discontinuous dynamics. The same style of discussion will be extended to the multidimensional case through the center manifold construction. Open problems will be considered.

Undergraduate students are also welcome.

Date: Thursday, April 5, 2012

Time: 16:30

Place: M-203 Seminar Room, Department of Mathematics, METU