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SEMINÁRIO DE SISTEMAS DINÂMICOS

Dia 26 de maio (sexta-feira), às 14h00, sala 6.2.38

The notion of twist: from the Poincaré-Birkhoff Theorem towards higher dimension

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Abstract: The celebrated Poincaré-Birkhoff Theorem, with its several applications, attests the relevance of twist as boundary condition for planar systems. But what becomes of the twist condition when we try to extend this result to higher dimensions? Whereas on the plane the notion of twist is quite intuitive, the same cannot be said about twist in higher dimensions. Indeed, due to the special nature of the plane, the Poincaré-Birkhoff Theorem can be seen as the superposition of several distinct higher dimensional result. In this seminar we will review the main steps taken in the study of this issue, focusing, in the last part of the talk, on some recent results introducing the notion of “avoiding cones condition”.

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