

DYNAMICAL SYSTEMS SEMINAR

A non-dissipative system as limit of dissipative ones

Ricardo Parreira

Department of Mathematics / UnB

 $\begin{array}{c} {\rm Date:~04/07/2019} \\ {\rm Time:~14:15} \\ {\rm MAT~Mini\mbox{-}auditorium~(AT\mbox{-}427/08)} \end{array}$

Abstract. Dissipative dynamical systems are characterised by the existence of a minimal invariant and compact subset of the state space attracting trajectories asymptotically, called *global attractor*. Therefore, the attractor global is an important object on the study of the asymptotic behavior of dissipative systems.

In this talk we shall consider an extension of the notion of global attractor suitable for non-dissipative systems, in order to study the asymptotic behavior of a family of dissipative systems which converges to a non-dissipative one.

The talk is addressed to graduate students and researchers as well.

References

[1] Silva, R.P., Non-dissipative System as Limit of a Dissipative One: Comparison of the Asymptotic Regimes. Bull Braz Math Soc, New Series (2019).