



Instituto de Sistemas Complejos de Valparaíso -ISCV-

VII Escuela de Verano en Sistemas Complejos

*Instituto de Sistemas Complejos de Valparaíso -ISCV-
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Abstract

Course

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Fom Karate club to Facebook: construction, dynamics and algorithmic challenges in social networks

The purpose of this course is to present the specificities of social networks in their structure and dynamics, and to study how the recent advances in their understanding as well as the arrival of online social networking brings new insights and challenges in the science of networks in general.

The first course will be an introduction to the object "social network", presenting which networks are concerned and which striking properties have been observed in it. In the second course, we will focus on one of this property, the "small world effect", and study it under the dynamical point of view. We will see how the dynamics of creation and evolution of these networks can give rise to such a striking phenomenon. Finally, the third course will focus on the challenges brought by the new "online" nature of social networks in terms of privacy and trust mechanisms.

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