26 de Març de 2015

Auditori

Centre de Recerca Matemàtica

COLLOQUIUM

Human contact networks: empirical data, modeling, and dynamics

11:30 Cafè

12:00 Intervenció a càrrec del Dr. Romualdo Pastor-Satorras, de la Universitat Politècnica de Catalunya

In recent years, the possibility to access large digital databases, as well as the development and deployment of large scale monitoring frameworks, has allowed to peer for the first time into the statistical properties of human behavior. To our surprise, the patterns of human activity have been shown to be extremely bursty, characterized by long tailed distributions, in opposition to the Poissonian behavior expected from traditional mathematical approaches. Apart from the insights that these discoveries have in the description and hypothetical predictability of human behavior, they are most relevant due to the direct connection between the patterns of human activity and the topological description of the representative social networks. Here we will discuss recent modeling efforts designed to understand and reproduce the empirical properties of social networks, as well as their effects on simple dynamical processes.