



Avviso di Seminario

Giovedì 5 Maggio 2016 alle ore 16:00

Presso l'aula Specializzazione di Fisica Sanitaria
del Dipartimento di Fisica e Chimica
Viale delle Scienze, Edificio 18, Palermo

il

Prof. Gholamreza Jafari

del Department of Physics
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terrà un seminario dal titolo:

Stubborn nodes and Glassy states in aged networks dynamics

Abstract: Individuals often develop reluctance to change their social relations, called "secondary homebody", even though their interactions with their environment evolve with time. Some memory effect is loosely present deforcing changes. In other words, in presence of memory, relations do not change easily. In order to investigate some history effect on social networks, we introduce a temporal kernel function into the Heider conventional balance theory allowing for the "quality" of past relations to contribute to the evolution of the system. This memory effect is shown to lead to the emergence of aged networks, thereby perfectly describing and measuring the aging process of links ("social relations"). It is shown that such a memory does not change the dynamical attractors of the system, but does prolong the time necessary to reach the "balanced states". The general trend goes toward obtaining either global ("paradise" or "bipolar") or local ("jammed") balanced states, but is profoundly affected by aged relations. The resistance of elder links against changes decelerates the evolution of the system and traps it into so named glassy states. In contrast to balance configurations which live on stable states, such long lived glassy states can survive in unstable states..

