

Tuesday, 21 May 2013, 15:00–15:45, Géopolis 2224

Seminar in Computational GIScience

<http://igd.unil.ch/geocomp/seminar>

Emanuele Strano

Cities and complex networks

In the last decade the paradigms of complex network percolated to urban science and to the study of urban form and urbanization process and several important results have been achieved.

The presentation starts with basic principles of spatial network analysis with an overview of main applications and empirical results. In particular it will be showed how the simple measures can characterize urban street network and retrieve important information on 1: presence of micro economic activities 2: urban historical evolution. Those results demonstrate that cities evolution has been governed by simple roles shared by any self organized planar graph opening new questions on the degree of complexity of urban settings.

Most promising perspective on this field point to a fusion with remote sensing in urban environment and to the analysis of very large areas. The presentation will conclude these perspective including preliminary results.

Short biography:

Born in Genoa (Italy), Emanuele Strano is currently a Phd student at LaSig, EPFL. He is an architect graduated at the Polytechnic of Milan and at the University of Strathclyde in Glasgow (Scotland). His research work is based on the fusion of complex spatial networks and remote sensing for the study of urbanization processes and the urban form.



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