PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH IN ACCORDANCE WITH ART. 22 OF LAW OF 30.12.2010 NO. 240 AT CENTRE FOR TERRITORIAL STUDIES OF THE UNIVERSITY OF BERGAMO (ACADEMIC RECRUITMENT FIELD 11/B1 – GEOGRAPHY) ACADEMIC DISCIPLINE M-GGR/01 – GEOGRAPHY AND M-GGR/02 – ECONOMIC AND POLITICAL GEOGRAPHY (CUP: F12F16000040001)

announced with decree of the Rector Rep. no. 690/2017 of 27.11.2017 and posted on the official registry of the University on 27.11.2017

RESEARCH PROJECT

Connectivity and urban regeneration: multiple sources of Big Data for socio-spatial integrated analysis

The candidate will be involved in the research group of the University of Bergamo on the Excellence Initiative project "Urban Nexus", coordinated by Profs. Emanuela Casti and Federica Burini, at the CST-DiathesisLab. More specifically, the research entitled "Connectivity and urban regeneration: multiple sources of Big Data for socio-spatial integrated analysis", object of this call for a research grant (SSD M-GGR/01 Geography and M-GGR/02 Economic and political geography, Area 11 - Historical, philosophical, pedagogical and psychological Sciences, Sector 11/ B1 - Geography). The candidate will have as scientific directors Professors Federica Burini and Giuseppe Psaila and will operate within the working group of this research project under the
supervision of Prof. Emanuela Casti.

The objectives of the research program concern the identification of sources of Big Data that refer to urban areas of Bergamo, Lausanne and Cambridge, by applying intelligent modeling tools combined with cybercartography systems. In fact, Big Data represent a large potential coming from very different sources and require a reflection on their use; at the same time, cities cannot be analyzed by a center-periphery model, but rather assumed in their dynamism and Interference.

Moreover, citing Michel Lussault, they should be taken as a learning city, namely creating databases that intersect both quantitative and quantitative statistical data coming directly from the inhabitants in a participatory way. Crossing multiple sources (Social media, mobile phones, large industrial databases, government data, health data, field research data and survey, etc.), we will attempt to recover the spatial capital, ie. the set of skills that the inhabitants have in the place where they live, to be used as scenario on which to interpret the official statistical data in comparison with participatory data.

The idea will not only be to analyze the flow and mobility of city users, but to extract qualitative data aimed at highlighting the individual and collective contributions of the inhabitants. It will be interesting to see if it is possible to cross, process through intelligent techniques data modelling from different sources, for example the data of mobile phones and ISTAT census of the population, to get a deeper analysis of urban dynamics finally recovering the authentic meaning of the relationship between society and cities.