Complex Networks

These are the Key points of lecture which are enlisted in the following way:

Lecture 1: We were given an exposure to Netlogo and NW extension which gives us the flexibility to create a subset of a given global network and we can further describe it in terms of "context". These could be done in comparing special agentsets with repsect to normal agentsets. We were advised to look at the production model on the SLAPP homepage and get familiarise with it especially the part of "recipes" and its importance in the emerging behaviour of network. Apart from this, we were advised in different weblinks to familiarise ourselves with slides, research paper and books as a reading list to deepen our understanding of the subject.

Lecture 2: The lecture started having a look at the graph which represents transport network of Torino. Then, our mood and attention was diverted to look at the "production model" from different and new perspectives both in Netlogo and SLAPP/Python. The intelligence in doing our task on the model is threefold namely the observer, the agentlist and the actions taken by these agents. The lecture concluded with a good reading list to look at and educate ourselves further.

Lecture 3: We were given an exposure to look at the "Production Model" in detailed way on the SLAPP homepage where the key point is to play and do experiment on the model by creating or deleting nodes (factories). We also saw how to include or produce codes from other parts through our model. This is an interesting part of the lecture which pushes us to understand the overall phenomena and behaviour of the network. As usual, the lecture ended with different reading list including the literature on CT and ERA schemes by Prof. Terna.

Lecture 4: We were introduced how to use networkx library in python with an example. It taught us the use of dictionaries in python which is an important thing to do while defining and labelling the corresponding nodes on the network graph. We also learnt how to run parallel code on Netlogo using function _include. This gives an important exposure to modify the code using "xls" file which then can be run on shell. The lecture concluded with important reading list.

Lecture 5: Here, we learnt how to use observer schedule precisely. This allows us to play with nodes in display where we can also give a layout if we wish to do so. The lecture concluded with different reading list and Pizza lunch with professor as a token of his love and humbleness for us.

Concluding Remarks: The professor has inspired us as the participants to do deep thinking of the behaviour of the emergent network citing an example of Production Model. We all must strive to think deeper and different on networks.